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November 2025

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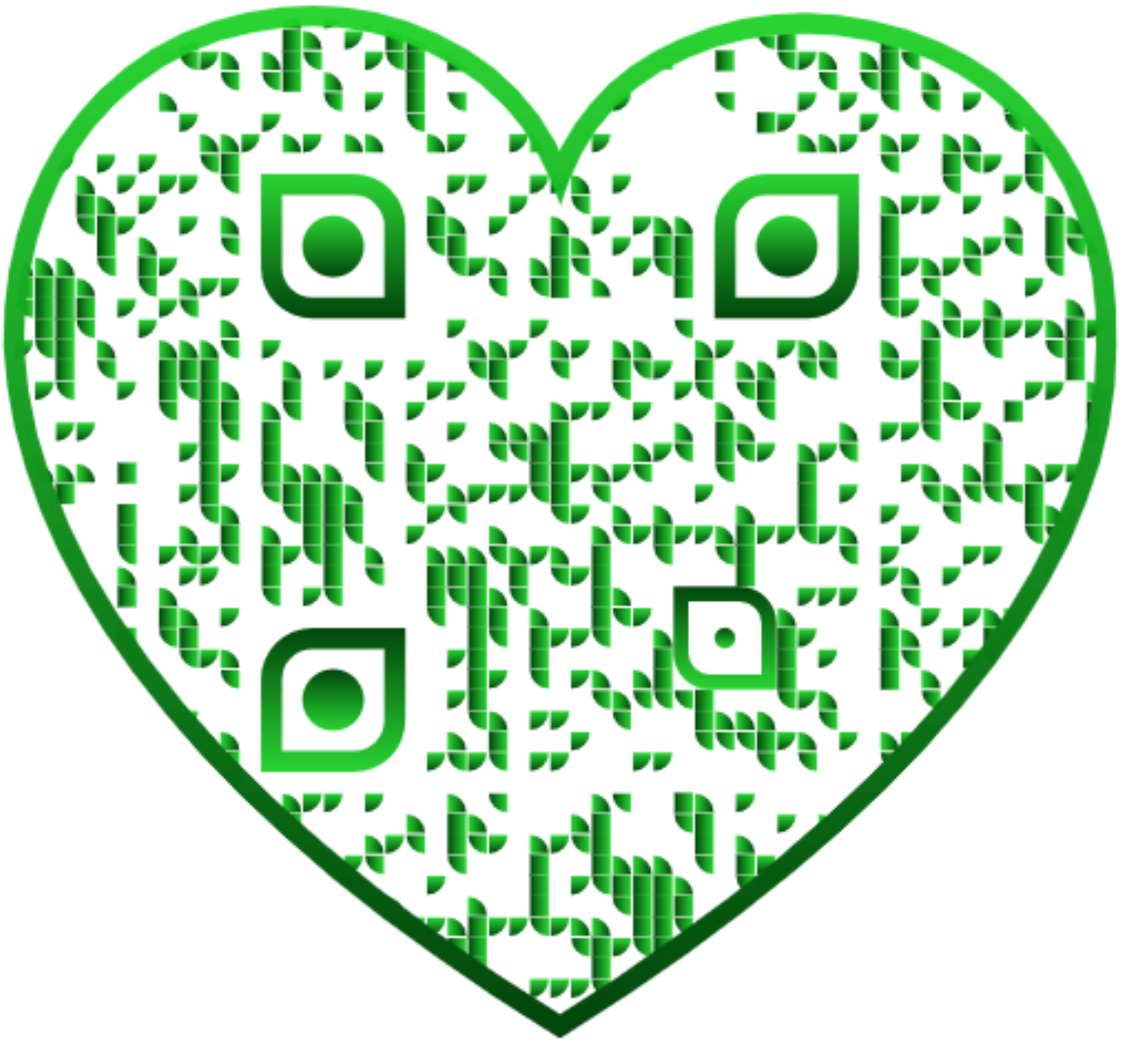
ECLISSE 40:
A New Angle to Door Design – P54

ECLISSE



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on the cover

With its distinctive 40-degree splayed frame, the **ECLISSE** 40 hinged door collection doesn't aim to hide. Instead, it adds a subtle but striking detail that enhances the surrounding architecture.

On one side of the hinged system, the door remains perfectly flush with the wall for that seamless, contemporary look. On the other, the 40-degree bevel creates a sculptural shadow line that catches the light and draws the eye.

See page 54 for more details.

welcome...

...to the November issue of ABC&D magazine...

Lostwithiel in Cornwall is the location for this month's project feature on page 04. We explore Lawrence Associates' transformation of an unassuming agricultural shed into a biodiverse and sustainable family home. Rising to the dual challenges of embedding the home within the surrounding landscape and retaining a sense of the land's farming history, the practice has created The Eyebrid which maintains the familiar barn form while incorporating innovative twists to the roofscape. Lawrence Associates used Archicad to construct the bespoke roof design.

Our November Hot Topic is from Geert Van Kelecom who discusses the issue of circularity in the construction industry on page 10, examining the hurdles to moving away from the linear model of extract, build and dispose to a more sustainable approach. We take a look at what's on offer at this year's HIX hotel design event on page 16; Roy Sullivan considers the differences between dead legs and blind ends and shares some practical tips for managing them on page 24; Multipanel looks at how to upgrade bathrooms in a working care home with minimal disruption on page 30; and on page 32, Ieuan Compton investigates enhancing flat roof resilience to mitigate the risk of solar PV systems.

Ruth MacEachern looks at the importance of choosing energy-efficient ventilation for both new builds and refurbishments on page 40; Tom Brough offers an insight into digitalisation and low carbon housing on page 46; and on page 52, Allegion UK delves into the golden thread revolution and harnessing information to transform fire door safety.

...from all at ABC&D...

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considerate design creates a biodiverse and sustainable *home*

In the rolling landscape of Lostwithiel, Cornwall, The Eyebrid demonstrates how an unassuming agricultural shed can be transformed into a sustainable family home. The clients approached ***Lawrence Associates*** *with a dual ambition: to embed the home within the surrounding nature while retaining a sense of the land's farming history...*

The client challenged the practice, which specialises in bespoke, high-quality architectural designs, to mimic the original timber structure with corrugated roofing, while modernising and upgrading the concept to turn it into their forever home.

Nature had to be at the heart of the project too, with the clients placing a strong emphasis on integrating the unique surroundings throughout the design and through rewilding of the surrounding pastoral land to improve biodiversity.

Creating a unique design

Named The Eyebrid, the final design maintains the familiar agricultural barn form while incorporating innovative twists to the roofscape. Lawrence Associates pursued a rounded geometry that mirrors the natural contours of the landscape, so opted for a curved roof that flowed into the hillside. This places the design into the terrain and allows space for a discreet second storey to capitalise on the surrounding views and provide additional internal living space.

According to Barry Chippendale, senior architect at Lawrence Architects, one of the challenges during the roof design was constructing the bespoke design and hiding guttering and the structural components of the building to make the building-to-landscape transition seamless.

He explained: "We used Archicad to create the design, so that we could easily create 3D models and walk-throughs that helped our communication with the contractors. We got the design on a big screen and visually showed the parts of the design we had challenges with so that we could get their insights and workshop solutions together."

"The 3D model also allowed us to walk the clients through the design and make any adaptations, based on their preferences. We were able to showcase how the roof helped blend the building into the surrounding landscape and ensure they would be happy with the results. We were also able to discuss the layout and material choices and easily update the design to help create their dream home."

Mindful materials

These material choices were critical to the final look of the home. The building will be clad in locally sourced materials, including timber and stone from a nearby quarry. This helps integrate the building within the natural landscape and celebrates Cornwall's heritage. It also lowers the embodied carbon of the project, with minimal emissions from materials deliveries to site.

The building will be anchored by a base course of locally quarried stone, selected for its durability and for its ability to encourage lichen colonisation over time – a slow process of integration into the living landscape. It also increases the variety of plants.

Zinc trims will be used to articulate roof edges, offering a contemporary counterpoint that resists weathering longer than the timber and stone. This controlled contrast creates a narrative of permanence, change, and modern intervention.

Barry added: "Using local materials helped overcome the first hurdle of many

Using local materials helped overcome the first hurdle of many Cornish planning processes. We sent over the 3D Archicad designs to the planning committee so they could easily visualise how the design uses local materials that are sympathetic to the natural landscape and maintain the agricultural feeling of the site...

Barry Chippendale
Lawrence Associates

Cornish planning processes. We sent over the 3D Archicad designs to the planning committee so they could easily visualise how the design uses local materials that are sympathetic to the natural landscape and maintain the agricultural feeling of the site."

To help hide some of the structural aspects of the building and improve biodiversity, a green roof was incorporated within the design. This choice naturally controls water runoff around the property, enhances biodiversity, and visually extends the meadow across the structure.

Understanding the sun's impact

Lawrence Associates chose to add in large expanses of glass to improve the cohesion between the inside environment and nature. Due to the quantity of glass, it was critical that they fully understood the impact that lighting, shadows and the time of year would have on the property.

They used Archicad to carry out a sun study that assessed the impact of overhangs and the site orientation. It was able to find the dark spots internally that would require artificial lighting solutions.

Barry continued: "We have an in-house SAP assessor who helps us during the design process and the sun study really supported his work. Cornwall is promoting solar energy usage and energy-efficient homes, and we have a similar ethos to create the best-performing homes we possibly can. This includes ensuring the internal living environment is as comfortable as possible."

Lawrence Associates also had to consider Part O building regulations, due to the volume of glazing. The sun study helped them prove that the thermal impact of the sun wouldn't cause the building to overheat. The in-house SAP assessor carried out thermal modelling. The 3D designs in Archicad helped this process by ensuring the correct dimensions of the walls, floors, doors and windows were input during the reporting process, saving considerable time.

The Eyebrid is currently under construction, but the design is set to maintain the agricultural feeling of the site while improving the biodiversity of the local area. It will also help showcase the high-quality materials that can be found in the surrounding Cornish environment. By focusing on a sustainable and energy-efficient approach, the family will enjoy a bespoke home that makes nature part of their everyday lives for years to come.

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the future is circular:
how to turn ambition into action

Circularity is one of the most talked about topics in the construction industry, however, it is still far from common practice. The sector is responsible around 62% (1) of the UK's total waste and 40% (2)carbon emissions, yet the industry still faces challenges preventing it from moving away from the linear model – extract, build and dispose – to a more sustainable approach. Here, ***Geert Van Kelecom****, Sustainability Manager at EQUITONE by Etex discusses how circularity isn't a fixed goal; it requires a continuous shift in mindset, reliant on shared responsibility across the supply chain...*

The push for sustainability

Circularity is becoming central to regulatory frameworks and market expectations. As the London Plan introduces mandatory circular economy plans for large developments, and regulations such as the Future Homes Standard demand up to an 80% reduction in operational carbon, the imperative to build with circular principles is clearer than ever.

As the sector faces growing reporting obligations, transparency is critical. To make responsible choices contractors require third-party verified data to prove that products meet current sustainability requirements. The provision of Environmental Product Declarations (EPDs) is a fundamental step to minimise the carbon cost of materials.

Barriers to circularity

Despite growing momentum, to many, the barriers to adopting circular principles feel daunting. The sector is built on long-established practices, fragmented supply chains, and products that were never designed with reuse in mind.

Much of the difficulty lies in inconsistent local practices, limited infrastructure for separation, and uncertainty around contamination. Without a coordinated system for certifying clean fibre cement waste, confidence in end-of-life routes remains low.

Circularity is more than just recycling leftover materials or diverting end of life waste from landfill. Instead, it embodies a fundamental change in mindset where systems are designed for adaptability, longevity, and disassembly at end of life.

The challenge is that much of the UK's supply chains are built around single-use products that do not easily lend themselves to reuse.

Design optimisation

Despite progress in material design, waste at project level remains commonplace, where poor planning and over-ordering lead to material losses on site.

Across the sector, contractors, architects, and suppliers are exploring the benefits of improved layout optimisation for panel design and production to minimise waste. EQUITONE's Design & Optimisation Service supports this shift. On average, 340 projects per year use this service across Europe, helping to avoid around 30,781m^2 surplus material and 364 t kg CO_2 embodied carbon. To put that into perspective: This equals the average yearly CO_2 absorption of 29,100 beech trees.

Circularity also starts with the design and development of our materials. We're dedicating 50% of our R&D capacity to sustainability: developing products and solutions with a lower environmental impact and increased circular content that is guided by eco design principles. Today we already have up to 20% circular content in our EQUITONE materials which is just a start towards more circular products without compromising on their performance.

EQUITONE fibre cement panels are a strong example of how design and performance go hand in hand with sustainability. They use fewer raw materials per m^2 compared to classic construction and are lightweight resulting in fewer emissions during transportation. They are also engineered to facilitate disassembly, removal and reuse, while also offering a 50-60-year service life.

End-of-life challenges

Circular thinking starts at the design phase with manufacturers right the way through to material segregation and waste tracking to establish reliable reuse pathways.

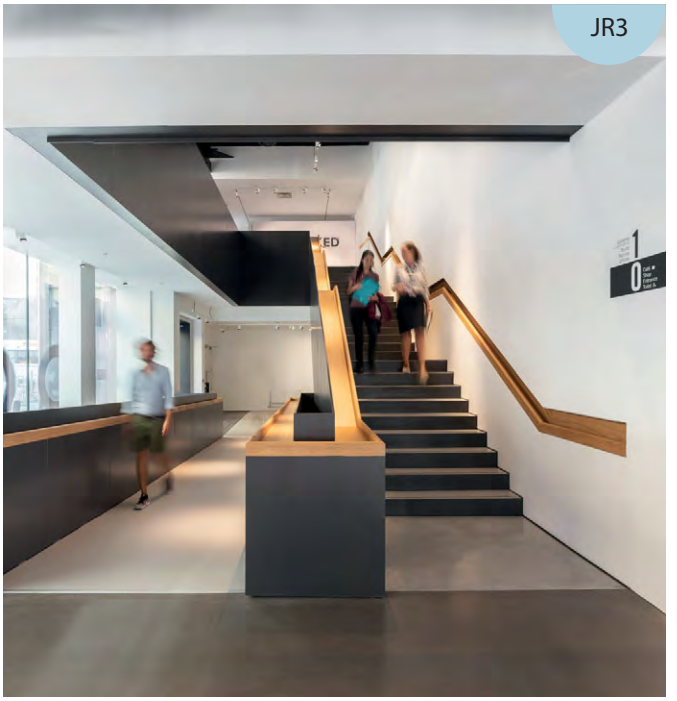
Currently, fibre cement waste disposal options mainly include landfilling or low value downcycling options. EQUITONE is investigating how to transform fibre cement waste into a high-value raw material for up-cycling within a circular economy.

Setting the standard

With certified EPDs, circular content declarations and verified technical data, manufacturers can give contractors and specifiers confidence in their decisions, supporting carbon reduction and resource efficiency throughout a project's lifecycle.

And with meaningful collaboration across the supply chain, and throughout the life cycle of a building, we can turn circular ambitions into everyday practice.

(1) Department for Environment, Food & Rural Affairs, UK statistics on Waste, July 2025
(2) CIOB, Climate Change and Sustainability



fermacell® Fibre Gypsum Boards:

Streamlining Installation Without Compromising Performance

In the pursuit of smarter, faster, and more sustainable construction, architects are increasingly turning to materials that offer more than just compliance, they demand innovation. fermacell® fibre gypsum boards are a prime example of this shift, offering a streamlined alternative to traditional plasterboard systems without sacrificing fire, acoustic, or impact performance.

One of the most compelling advantages of fermacell® fibre gypsum boards are their ability to reduce installation layers. Traditional plasterboard systems often require multiple layers, including pattresses, to meet structural and performance standards. This not only increases material usage but also adds time, labour, and complexity to the build. fermacell® single-layer fibre gypsum boards eliminate the need for these additional components, simplifying the process while delivering superior results.

Thanks to its dense composition, a blend of recycled paper fibres, gypsum, and water, fermacell® boards are inherently robust. This density translates into exceptional load carrying capacity, allowing fixtures to be mounted directly onto the board without the need for pattresses or reinforcements. For architects, this means greater design flexibility and cleaner detailing, especially in commercial interiors where wall-mounted elements are more frequent.

Performance-wise, fermacell® excels across the board. With an extensive suite of EN test data underpinning the boards fire credentials, its fire resistance meets and often exceeds regulatory requirements, making it suitable for high-risk environments such as schools, hospitals, and multi-residential buildings. Its acoustic insulation properties are equally impressive, with single-layer systems achieving sound reduction levels that typically require double-layer plasterboard setups. This is a game-changer for projects where space efficiency and acoustic comfort are paramount.

Impact resistance is another area where fermacell® fibre gypsum boards outperform. In high-traffic areas, walls are subject to frequent knocks and abrasions. fermacell®'s solid core construction ensures durability and longevity whilst conforming to crowd load requirements, reducing maintenance costs and enhancing the building's lifecycle performance.

From a sustainability perspective, fermacell® continues to lead. Its EPD verification confirms its low environmental impact, and its production process – free from adhesives and reliant on recycled materials – supports circular economy principles. By reducing the number of layers required, fermacell® fibre gympsum boards also cut down on transport emissions, packaging waste, and on-site debris.

For architects working on timber frame or commercial projects, the benefits are even more pronounced. fermacell® fibre gypsum boards dimensional stability and moisture resistance make it ideal for off-site construction and modular builds, where precision and reliability are key. Its ability to perform multiple roles – structural, acoustic, fire-resistant – within a single board simplifies specification and accelerates project timelines.

In an industry where time, cost, and sustainability are under constant scrutiny, fermacell® offers a rare formula: efficiency, performance, and environmental integrity. By reducing installation layers and eliminating the need for pattresses, it empowers architects to design smarter, build faster, and deliver better outcomes for clients and communities alike.

fermacell® fibre gypsum board isn't just a board, it's a building solution. And for architects ready to embrace the future of construction, it's a material that truly delivers.

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Safeguarding the Millennium Commission's cultural legacy as landmark venues face rising costs

New analysis shows flagship sites such as The Lowry and The Glasshouse continue to deliver major economic, social and educational returns – highlighting the need for funding frameworks that reflect their long-term value.

With government guidance on cultural funding due to be updated next year, new analysis from national planning and development consultancy Lichfields shows that Millennium Commission-backed venues continue to generate significant returns for their communities – but warns that traditional appraisal models may understate their wider public value as operating and decarbonisation costs rise.

Drawing on recent casework for two flagship sites, the study found that The Lowry in Salford contributes around £48m a year in Gross Value Added (GVA) to the economy and welcomed 860,000 visitors in 2023/24. In the North East, The Glasshouse International Centre for Music has delivered more than 233,000 learning sessions and supported over 2.8 million attendances to education programmes since opening.

Alongside these headline numbers, the analysis highlights wider benefits in skills, inclusion and place-making that are often under-represented in conventional appraisal models.

Alex Davies, Associate Director at Lichfields, said: "Venues like

The Lowry and The Glasshouse were built to inspire – and they still do. The returns are clear in jobs, visitors and learning, but the community value runs even deeper. As costs rise and net-zero upgrades come due, we need business cases that capture the whole picture so we can protect a national legacy and keep it working for the next generation."

For more information visit **https://lichfields.uk/**

A recently completed contract for an underfloor heating company has demonstrated how a Grade I listed landmark building can undergo a transformation, in terms of its energy efficiency, without any traces being left on the existing historic internal fabric: while also future-proofing it for a switch to a fully renewable heating source in the coming years.

St. Paul's Church in Covent Garden is not only known for its architecture but also as the 'Actors' Church', hosting memorials to

Ultra-Fin UFH assists quest for net zero with supporting role in the Actors' Church

film and stage stars from Charlie Chaplin to Sir Noel Coward. Working with the Diocese of London and under the Church of England Net Zero Carbon programme the Church has achieved what might have seemed impossible less than a year ago.

Established in 2024, **Ultra-Fin UK** already has a strong presence in the heritage sector and was exhibiting at this year's Listed Property Owner's Club show at Olympia. The team met Westminster Churches Net Zero Forum Officer, Alison Moulden, who made the introduction to the Parish priest, Revd. Simon Grigg, and Parish Administrator, Phil Hunt, who took a keen interest in the potential of the underfloor heating system which is designed for joisted floors.

Director Tom Dixon-Smith said: "Our business model normally involves supply and training but the nature of this project inspired us to take on the role of manufacturer, supplier and installer, using our own team of engineers. The Church is so important we weren't prepared to let anyone else complete the project".

Tom went on to say, "Phil Hunt did a fantastic job of steering the project application through all the Grade I listing and other compliance issues and we supported that by producing what became a 250-page document detailing not just the system but also the installation method. For example, we had to calculate how many notches we would have to take out of the existing joists once the historic floorboards were lifted and also specify the insulation solution over which the system would run."

The support for the insulation is provided by a super tough, A1 fire rated breathable PhotonWrap barrier, which also enhances the heat delivery from the Ultra-Fin diffusers by being heat reflective.

The membrane was lapped over the joists, held in place with staples and painted black along the top of where it sits on the joists to prevent a shiny glare from between the floorboards. The composite PEX Aluminium pipe and the Ultrafins were installed during a 13-day period in August 2025, before the company's engineers completed the connections to the existing boiler and undertook the commissioning. The new underfloor heating extends across the whole of the nave from in front of the Altar to the main entrance.

www.ultra-fin.co.uk

JR4

JR201

Fassacouche: Reinforced performance with Fassanet *Maxi Mesh*

Fassa Bortolo's FassaRend Cycle 2E system represents a complete and reliable render solution designed for long-term durability and structural integrity. Central to its performance is Fassanet Maxi, the high-strength reinforcing mesh that delivers superior resistance to cracking, movement, and impact – ensuring a stable and enduring render finish across a range of substrates.

Fassanet Maxi is manufactured from alkali-resistant glass fibre, specifically engineered to maintain its strength even under the challenging conditions faced by external render systems. When embedded into the Fassacouche, it forms a reinforced layer that distributes stress evenly across the surface. This not only prevents hairline cracking but also enhances the system's overall flexibility, making it ideal for both new-builds and refurbishment projects where substrate movement or thermal expansion may occur.

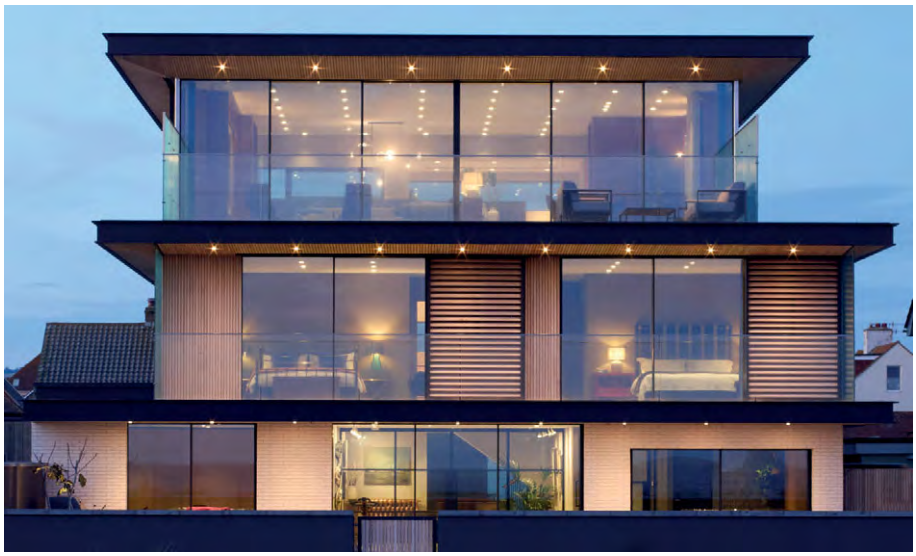
Another key advantage of Fassanet Maxi is its lightweight yet robust structure, which allows for quick application and easy embedding without compromising on mechanical strength. It works seamlessly within the Fassacouhe system to deliver a balanced combination of rigidity and elasticity – the hallmark of a well-engineered façade.

Beyond its mechanical performance, Fassanet Maxi contributes to the system's weather resistance and long-term stability. By reinforcing the render layer, it supports the integrity of finishes exposed to rain, frost, and thermal cycling, ensuring the façade remains intact and aesthetically consistent for years to come.

Together, Fassacouche and Fassanet Maxi create a comprehensive render solution that merges Italian technical expertise with practical site performance. The result is a system that not only looks refined but stands up to the demands of modern construction. Providing confidence, strength, and longevity on every façade.

Got a question?
We are only a call away

For more information on our Fassacouche, Fassanet Maxi mesh or other rendering solutions, please don't hesitate to contact us at **info.fassauk@fassabortolo.com** or **01684 218 305**



Schöck Isokorb meets building overhang steel frame challenges

Shoreham Beach House is a private residential development at Shoreham-by-Sea in Sussex. Jim Miller Design, a leading architectural practice based in Hove, has designed the project using Passivhaus principles. One of the challenges involved the extensive number of connections between the internal and external steel frames at the various overhangs.
To minimise thermal bridging issues at these connectivity points, the Schöck Isokorb T type S was incorporated throughout.

The house faces south with the main living space on the second floor, which enjoys a large terrace providing superb views along the coast. Architecturally, the form of the building is roughly cuboid, resulting in a good volume-to-surface area ratio (form factor). This results in reduced energy for heating and cooling, making it easier to achieve high performance targets. With the house being located on the beach, there is a calculated risk of flooding, so the site was raised 300mm, with the ground floor walls constructed of waterproof concrete. However, the upper floors switch to steel frame and timber with natural insulation, to reduce the carbon footprint. Overall the main technical criteria is to provide a low energy, comfortable and healthy indoor environment all year round.

Extensive steel frame connectivity

Given the technical criteria, the need to manage solar control drove the overall aesthetics of the project, especially to the south, with southerly overhangs to all three floors being achieved through the balcony, terrace and second floor overhangs wrapping around the building. The extensive overhangs limit overheating and provide architectural interest, but also created 48 connections between the internal and external steel frames; and these thermal bridges needed addressing.

Practice owner, Jim Miller, comments: *"I chose the Schöck Isokorb T type S because it reduced heat loss by about twice that compared to the other manufacturers that we considered. Additionally – and critically – the Isokorb clearly demonstrated that there would be no condensation risk to the inner steels, which was not the case with some alternatives".*

Minimal thermal bridging with the Isokorb T type S

The Schöck Isokorb T type S is a load bearing thermal insulation element that reliably separates and minimises thermal bridges at the connections to steel structures (such as canopies, frame systems or balconies) and is designed for both new build and renovation projects.

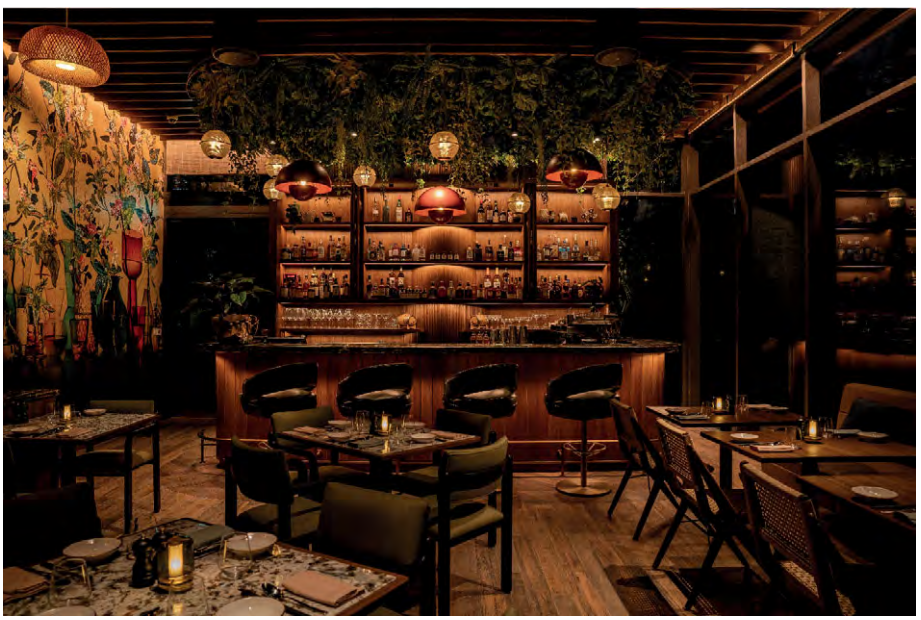
Consisting of modules T Type S-N for tensile forces and T Type S-V for transferring shear and normal forces, it can be adapted for any profile size and structural load. The unit is able to withstand extremely demanding loads and its stainless steel components mean complete corrosion protection.

Totally verifiable performance

The dependable Schöck Isokorb range offers the widest selection of structural thermal break solutions from any European supplier; and in the UK enables projects to meet full compliance with the necessary Building Regulations. There are solutions for concrete-to-concrete, concrete-to-steel and steel-to-steel. All products have the security of independent BBA Certification.

Contact Schöck on 01865 290 890; or for full details of the Isokorb range, visit the solutions page on the website at **www.schoeck.com/en-gb/solutions**

JR5



Celebrating hotel design

Each year, **HIX LDN** gathers Europe's hospitality interiors community for a true celebration of hotel design.

Welcoming over 5,000 guests to London's Business Design Centre for two days of insightful talks, immersive installations, networking opportunities and an exhibition of new interior products from the world's leading labels, HIX is a platform for the latest trends across the hotel interior experience.

Bringing together architects, designers, operators, developers, investors, specifiers, project managers and more, the show floor is home to an ever-changing design experience with all the inspiration you need to take your projects to the next level.

HIX 2025: Culture Clash

While hospitality might be a global industry, each continent, country, region and even neighbourhood holds its own unique legacy, and its own take on what constitutes a great stay.

The values and customs that characterise these interpretations – often developed over thousands of years and informed by rich social traditions and communal heritage – have formed the core for some of the world's most celebrated projects, brands end experiences.

From the Japanese concept of omotenashi that centers hospitality around care rather than expectation, to the Athithi Devo Bhava principles of India that see guests considered as gods, hotels showcase the best a culture has to offer in one of the most important measures of its success – how it looks after others.

Exploring the intersection of hospitality, design, history and philosophy, our theme this year is a celebration of such cultures, and the power of authentic hospitality narratives in a rapidly changing marketplace.

Guiding every element of our 2025 programme, from the concepts behind our immersive installations to the soundtracks at our parties, Culture Clash will see the HIX show floor transformed into a kaleidoscope of hotel heritage, taking guests on a journey through the ideas and aesthetics that have defined these distinct identities.

Across two days of panels, presentations and interviews, HIX Talks explores the future of hotel design with the industry's brightest minds.

Sharing actionable advice and the inside stories behind world-leading projects and practices, hear from our leading line-up of expert industry speakers as they address the challenges and opportunities set to define a new era of hospitality experience

For new perspectives

Across two days of panels, presentations and interviews, HIX Talks explores the future of hotel design with the industry's brightest minds.

Sponsored by Kohler, this year's agenda is guided by the theme of 'Culture Clash' and addresses topics including the shifting definitions of luxury, innovations in hotel wellness, and how technology is transforming both hospitality spaces and the studios creating them.

Pushing the boundaries of hospitality design

Each year, HIX pushes the boundaries of hospitality design with a signature installation strand. Bringing a series of immersive, inspiring and experimental concept spaces to our show floor, we've grown the world's first mycelium bar with WeWantMore; investigated the 'umwelt paradigm' with Blacksheep; and reimagined the iconic Business Design Centre as an innovative urban agriculture hub with Purcell.

HIX LDN takes place at London's Business Design Centre from 26-27 November 2025. Register for your free show pass at ***www.hixevent.com***

JR203

Fast, Flawless and Built for Hospitality: Naturepanel Unveils New Launches at HIX (Stand 2)

Quick to Fit, Built to Last

When speed matters on site and downtime is not an option, Naturepanel delivers. The award-winning waterproof wall panel brand from **Grant Westfield** is redefining how hotels approach interior fit-out and refurbishment with a range of new, easy-to-install panels that combine design flexibility with commercial-grade durability.

Launching at HIX 2025, Naturepanel's latest collections prove that rapid installation does not have to mean compromise. With no grout, minimal surface prep and the ability to fit over existing wall surfaces in many cases, these panels make transforming hotel bathrooms, wellness zones and feature walls faster, cleaner and more efficient than traditional tiling.

Speed That Works for Contractors

Designed with the needs of both specifiers and contractors in mind, the panels are precision-manufactured for straightforward fitting, helping reduce labour time, waste and disruption across hospitality refurbishment programmes. For live hotel environments where guest experience cannot be compromised, this installation advantage makes Naturepanel a smart, commercially driven choice.

Shiplap Brings Texture and Warmth

At the forefront of the new product launches is the Shiplap collection, a wide-slat design that brings relaxed structure and warmth to boutique hotel bedrooms, spa suites and reception areas. Offered in seven natural-inspired décors including Grained Alpine White, Beige Grey Lorenzo Oak and Warmia Walnut, each panel features subtle etched detailing that captures the texture and visual depth of real timber while delivering a seamless waterproof finish.

Slim Profiles, Natural Tones

Naturepanel has also extended its Wood Slat collection with new colours and surface options that complement minimalist interiors and natural palettes. The slim vertical profile works well in Japandi, Scandinavian and wellness-inspired schemes, offering flexibility for use across headboards, walls and zoning applications. Panels can be fitted vertically or horizontally depending on design intent.

Now Available in Full Height

To support use in taller wall applications, the range now includes a 2700mm panel format in selected décors. This full-height solution reduces the need for horizontal joins creating a continuous finish that enhances both visual impact and ease of maintenance.

Less Mess, More Efficiency

While aesthetics are key to guest satisfaction, contractors and hotel operators also benefit from practical performance. Naturepanel's grout-free system means no drying times, fewer wet trades and less mess. The result is a faster fit with less disruption to surrounding areas, allowing rooms to return to service quickly and efficiently. The finished surface is also easy to maintain and hygienic, with no grout lines to trap dirt or moisture between guest stays.

Sustainable, British-Made and Backed by Warranty

All Naturepanel products are made in Britain and come with FSC certification, 100% recyclability and a 30-year warranty. This ensures they support wider project goals around sustainability, long-term durability and asset performance.

Visit Grant Westfield at HIX 2025 on 26 and 27 November at the Business Design Centre in London to explore the full Naturepanel collection and view the new launches up close.

www.naturepanel.co.uk

ENQUIRIES VISIT www.abcd-info.co.uk EMAIL datateam@c-cms.com POST use address card

Haddonstone
www.haddonstone.com

Callum Gouldbourne has been working at Haddonstone for four years at the Grade II listed head office, manufactory and show gardens in Northamptonshire. He started as a factory operative in the semi-dry cast department, packing the stone for 18 months, then had training as an Assistant Project Manager which prepared him very well for the role of Project Manager which he holds today. Callum comments: "My role is so diverse. I do everything that comes with managing contracts, from quoting, drawing, processing orders, and site visits. I am also responsible for after-care/sales. Haddonstone provides many of the country's luxury housing developers and most discerning private clients with the highest quality architectural and ornamental cast stone products, and my job is to make sure they are all served in the most professional manner."

JR204

The Automatic Door Suppliers Association (ADSA)
https://adsa.org.uk/

The Automatic Door Suppliers Association (ADSA) has strengthened its leadership team with the appointment of Joe Greenlees, Managing Director of Record UK Ltd, to its Executive Committee – the group responsible for the association's governance and strategic direction. Joe succeeds Mark Ayton, who is stepping back from his ADSA role after many years' loyal service, to manage his extended role as Record's Regional Director of North Europe. With more than nine years at Record UK and his promotion to Managing Director, in April this year, Joe brings a blend of operational experience, strategic insight and infectious enthusiasm for developing the next generation of industry talent. "It's a real privilege to join ADSA's Executive Committee," said Joe. "Record UK has been part of ADSA's story from the very beginning, and I'm proud to continue that legacy."

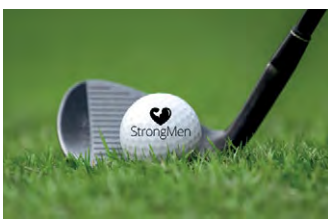
JR205

Style
www.style-partitions.co.uk

Moveable wall specialist, Style, proudly supported the annual StrongMen Charity Golf Day, held on 24 October at the Old Fold Manor Golf Club in Chipping Barnet, London.

Organised by the bereavement support charity StrongMen, the event brought together 40 players from across the construction and architectural sectors to raise vital funds and awareness for men's mental health during times of grief.

Teams taking part included Style, Optima, Franchi, Celtic, Spacecraft, Verity, Erith, and Overbury, all coming together for a day of friendly competition, fundraising and networking.



Next year's event is already confirmed for 12th June 2026, once again at Old Fold Manor Golf Club.

For more information, or to make a donation visit *wwwstrongmen.org.uk*

JR206

Thomas Dudley
www.thomasdudley.co.uk

Thomas Dudley and The Marmon Group Limited (TMGL), a US-owned (Marmon Holdings, Inc) company who provide engineering solutions across 11 industry groups, have agreed terms to transfer the production of Bailey products from Cerro EMS (a company within TMGL) to Thomas Dudley who will continue to manufacture Bailey products in the UK.

Bailey Products is well known for its range of high-quality drain rods and test plugs which are manufactured and distributed from its site in Birmingham, West Midlands. The company's manufacturing pedigree stretches back to the 1940s.

Thomas Dudley will continue the manufacturing and sales operations and current Bailey Products staff will transfer on completion of the deal from 10 November 2025. Bailey Products will continue to operate from the Liverpool Street site for the time being.

Martin Dudley, Chief Executive at Thomas Dudley said: "We are delighted to add such a strong brand to our portfolio and we welcome our new colleagues who are joining us. Thomas Dudley is committed to manufacturing products in the UK and employing local people, and the addition of Bailey Products to our group will be a significant step forward for our business as we continue our plans to expand and grow to support the needs of our customers. Bailey products have a great reputation in the market and we look forward to further developing our drain rod and test plug ranges in the UK and overseas."

Mark Jones, General Manager for Bailey Products (Cerro EMS) commented: "We are delighted that Thomas Dudley have agreed to acquire Bailey Products. Thomas Dudley shares the same values as Bailey Products in British Manufacturing and empowering their employees. Bailey Products are a well-established and trusted brand, and we are pleased to have found a company that is committed to strengthening and growing the Bailey brand."

Thomas Dudley is a British manufacturing business that celebrates its 105th anniversary this year. Established in 1920 the business is privately owned and includes a foundry based in Dudley, plastic extrusion and injection moulding machines, and zinc die-casting plus precision plastic moulding equipment mostly based in the West Midlands. Thomas Dudley supplies cast iron covers and frames plus fill and flush technology for plumbing systems as well as a bespoke fabrication service in metal and plastic, and an extensive range of ball valves, fittings, and seals, including their own brand of drain rods and test plugs.

Bailey Products specialises in the manufacture of cleaning rods and accessories, test plugs with associated testing equipment for the drainage industry, and telecoms specification duct rods and accessories for cable laying.

Drain rods are used to clear pipes and drains, including those connected to sinks, toilets, and outdoor drains. Supplied in packs that include a number of extension rods and a range of accessories, they are required whenever there is a physical obstruction to the flow of the pipe that needs to be cleared.

Included in the Bailey product range are drain rod recovery tools, chimney sweeping kits, telecoms duct clearing rods, and drain test plugs which are used to make a temporary seal in a pipe system in order to test it for air tightness and therefore ensure it is free of leaks or defects.

JR207

New guidance helps housebuilders combine in-line solar PV and air permeable underlays

New guidance from **Proctor Group** means housebuilders can now use integrated (or in-line) solar PV together with Proctor Air®, confident that they are meeting all relevant technical requirements – including the NHBC's 2024 Technical Standards, with an alternative BBA approved solution which negates the requirement for double battening.

Backed by leading moisture experts in the UK and Europe, the guidance is also reflected in an update to Proctor Air's BBA certificate. That means designers and specifiers can follow the guidance in the knowledge that it has been assessed by an independent third party.

As an air permeable, low resistance (APLR) membrane, Proctor Air reduces the risk of issues occurring in roof spaces due to poorly installed vapour control layers or ventilation. And because it provides a more uniform flow of air than standard ventilation solutions, it means the roof requires no other ventilation measures.

Proctor Air has proved a popular solution since its launch. However, an update to the NHBC Technical Standards created confusion around the use of in-line solar PV with APLR membranes. Housebuilders and developers have therefore been reluctant to specify the two together, despite wanting to use APLR products.

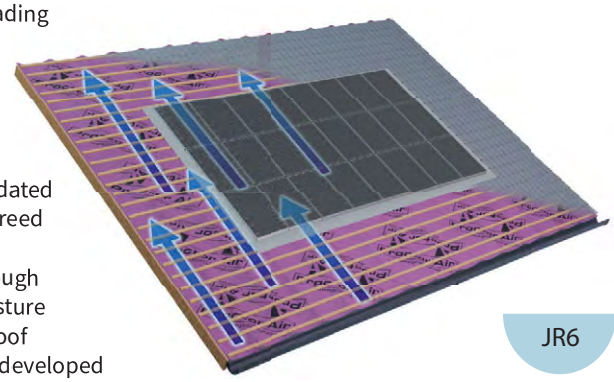
With rooftop solar expected to be made compulsory on new-build housing, the adoption of PV panels will only intensify as specifications adapt to the lower carbon emissions required by the Future Homes Standard. And as those same homes become even better insulated and more airtight, they will rely on the performance of air permeable membranes to help reduce condensation risk in loft spaces.

To overcome the confusion, Proctor Group undertook industry-leading research to investigate the issue, engaging Glenfeulan Consulting to undertake modelling using RoofCond software. The renowned Fraunhofer Institute then validated the reasearch findings and agreed with the conclusions.

Equipped with a more thorough understanding of air and moisture movement through pitched roof coverings, Proctor Group has developed a recommendation for pitched roof specifications featuring in-line solar PV and Proctor Air.

Throughout, Proctor Group consulted with the BBA, who reviewed all of the research. Proctor Air's BBA certificate has been updated to reflect the new recommendation, and to serve as independent verification that the underlay can be used with inline PV panels, without additional ventilation in either the loft space or the batten space, assuming our installation instructions are followed.

Find out more: **https://proctorgroup.com/products/proctor-air**



JR6

Cemex announces brand new Dry Mortar and Sprayed Concrete Plant in Swindon

Cemex is excited to announce that it is opening a state-of-the-art Dry Mortar and Sprayed Concrete plant in Swindon, Wiltshire, marking a significant milestone in its journey to provide high-quality mortar products nationwide.

This new facility adds to our established Dry Mortar and Sprayed Concrete sites at Dove Holes, Derbyshire, and Braintree, Essex. It enables us to expand our mortar offering and serve customers across the country, particularly in the South East and South West, ensuring timely deliveries of materials with consistent qualities.

The plant will incorporate enhanced manufacturing processes and utilise an efficient drying system specifically developed to reduce heat consumption, guaranteeing to produce mortar products with the highest standards of durability and performance.

Supporting our commitment to sustainability, Cemex's Vertua® lower carbon mortar will be manufactured at the Swindon facility. These embody up to 30% less carbon than conventional industry standards products, through incorporating our lower carbon cements and admixtures, providing you with products that have a reduced environmental impact.

Additionally, the plant will also produce our wide selection of bespoke coloured mortars, designed to help you achieve the perfect aesthetics for your construction projects.

With a strong history in mortar, Cemex stands as a leading expert in delivering consistent and reliable factory-produced mortar solutions, backed by contractors and tradespeople alike.

We are committed to achieving excellence and the meeting the needs of our customers by providing mortar products that complement the design, look, and appeal of building projects, whilst ensuring robust performance features.

For more information, please head to: **cemex.co.uk**

JR7

JOHNSTONE'S TRADE™ Reveals Secret Safari as 2026 Colour of the Year

Johnstone's Trade, a brand by PPG, has revealed Secret Safari (PPG1110-4) as its 2026 Colour of the Year. This versatile yellow-green blends soothing comfort with subtle energy, making it a dynamic choice for a wide range of spaces.
The shade is part of PPG's 2026 global colour theme, Parallels, which features three distinct palettes: Authentic, Visionary, and Expressive.

Selected by PPG's global team of colour experts, Secret Safari reflects extensive research and cross-industry collaboration. The annual colour selection process draws on global insights from architecture, design, consumer behaviour, and material innovation.

The resulting shade influences not only interior design but also consumer goods, industrial coatings, automotive finishes, and more.

"Secret Safari is a versatile shade that adapts to its surroundings," said Donna Taylor, Colour Design Manager at Johnstone's Trade. "It brings calm in natural daylight and reveals rich depth in shadowed settings – making it a compelling choice for both residential and commercial interiors."

The Parallels theme explores how shared global influences inspire diverse personal responses. Each of the three palettes offers a unique design direction:
Authentic – Grounded in earthy tones and tactile textures, this palette fosters simplicity and a deep connection to nature.
Visionary – A bold interplay of contrast and clarity, designed for forward-thinking spaces.
Expressive – A celebration of colour confidence, with vibrant hues and unexpected pairings that spark creativity.

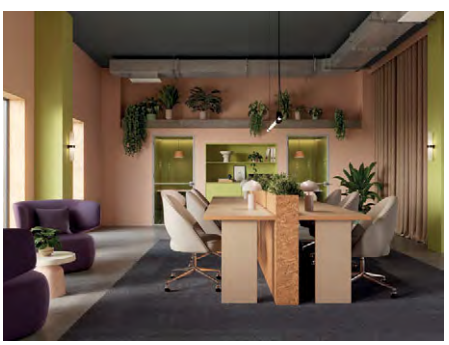
Secret Safari complements all three palettes, offering a flexible foundation for colour layering and spatial storytelling. Its botanical tone enhances interiors that aim to feel connected to nature.
In hospitality settings, it creates a calming atmosphere, while in residential spaces, it delivers a bold, contemporary edge. Its ability to shift with changing light adds depth and visual interest to walls, cabinetry, and soft furnishings.

Secret Safari can be tinted across a range of high-performance coatings, including:
• Johnstone's Trade Perfect Matt – for flawless, low-sheen finishes
• Johnstone's Trade UltraLast Matt – extreme durability and stain resistance for high-traffic areas
• Johnstone's Trade Aqua Guard – ideal for woodwork and trim, combining water-based technology with long-lasting protection

From education and healthcare to hospitality and residential interiors, Secret Safari offers specifiers a trend-forward yet timeless colour solution. Its layered depth and natural aesthetic evoke feelings of resilience and renewal.

Johnstone's Trade supports specifiers with advanced tinting technology, colour consultancy, and digital specification tools – ensuring seamless integration of Secret Safari into any project.
With Environmental Product Declaration-backed coatings and low-VOC formulations, Johnstone's Trade products meet the performance and sustainability standards demanded by today's built environment professionals.

Explore Secret Safari and the full 2026 colour trends at:
https://ppgac.co.uk/colour-trends



JR211

ROCKWOOL strengthens commitment to leadership in fire safety with new product range

Construction product manufacturer **ROCKWOOL** has announced the first products to launch from its new global centre of excellence for fire-stopping at Hams Hall, Birmingham.

Renowned for its Euroclass A1 non-combustible stone wool insulation, the company has used its deep fire expertise and state-of-the-art manufacturing facility to develop a new in-house fire-stopping range including coated batt, sealants, collars and wraps.

Industry-leading standards

In line with the company's commitment to industry-leading practice, the new FirePro range has been tested and classified to the most recent fire resistance standards (including BS EN 1366-4, BS EN 1366-3 and BS EN 13501-2) that will become mandatory in 2029, ensuring the range is ready a full four years early and helping customers to get ahead and future-proof their specifications. For added assurance, FirePro's testing has also been third party audited and certified for safety, reliability, and regulatory compliance by independent certification body UL-Solutions.

"At ROCKWOOL, we don't just meet fire safety standards – we help drive best practice. That means advocating for tough, easy-to-apply regulations and approaches that reflect the real risks facing modern buildings," explains Ben Peach, Product and Technical Solutions Director at ROCKWOOL Ltd.

"We're always looking ahead and helping our customers to navigate change, which is why we've tested and classified the new FirePro range to the latest fire resistance standards – so our customers can specify with confidence."

By developing the range in-house and managing the product line from conception to delivery, ROCKWOOL is also perfectly positioned to pursue ongoing innovation and drive industry-leading performance and sustainability.

Specialist support for customers

The first products in the new FirePro range were available to order from 2 October 2025, with the company's specialist fire and specification teams on hand to assist customers with bespoke technical and project support.

"Customers need access to expert resources to specify with confidence," says ROCKWOOL Ltd's Head of Fire Protection & HVAC, Matt Jones.

"That's why we've launched the FirePro range with our specialist teams on hand as well as a robust package of technical literature. This includes a new interactive Fire-stopping Standard Details Guide that provides easy access to safety-critical standard details to support specification and installation."

New Training Academy coming soon

To further support industry partners as they adapt to changes driven by the Building Safety Act, ROCKWOOL plans to open a specialist training academy at the Hams Hall site this winter.

Providing clients with the opportunity to experience product demonstrations and learn best practice installation techniques for ROCKWOOL's fire-stopping, HVAC and fire protection products, the company expects to welcome a range of visitors from installation contractors and specifiers, to fire service personnel who are working to assess and safeguard public safety.

The academy will complement ROCKWOOL's existing e-Learning platform and furthers the company's work to support skills and competence in the built environment. More details will be available shortly to those seeking to book a training session at the new Midlands facility.

www.rockwool.com/uk

SFS Center Point System launched to enhance accuracy, appearance and the environment

Building on its well-founded reputation as a manufacturer of cladding support systems and high-performance fasteners, **SFS Group Fastening Technology** has developed an advanced, user-friendly new system for installing flat panels across both steel and aluminium sub-frames. Amongst the benefits of the patented Center Point System is the fact that it answers the challenge of accurately positioning the self-drilling, double thread fastener at the exact centre of the hole in the panel, ensuring the avoidance of subsequent damage to the surface through thermal movement. It also prevents the environmental risk of plastic waste polluting the site by employing a bio-degradable, pre-fitted centring sleeve, which will not constrict the space around the shaft with any residue.

NEC Contracts has gone digital

NEC Contracts has launched NEC Digital, an intuitive online contract drafting platform that transforms how users work with the internationally recognised NEC suite of contracts. Built on the foundational principles of clarity, simplicity and collaboration, NEC Digital provides seamless access and management capabilities, unites stakeholders together on a single, online platform and creates comprehensive digital libraries of clauses and terms for future projects. More than just a digital version of paper contracts, NEC Digital is a new subscription-based service designed specifically around the needs of clients, contractors, consultants and project teams.

Make short work of waterproof flooring with Moduleo LayRed

If your project needs a floor that's fast and easy to install and which brings performance without compromise, then the next generation of Moduleo LayRed engineered vinyl flooring from **Unilin Flooring** is here. Thanks to the addition of Hydroseal and the precise fit of its Uniclic joint, Moduleo LayRed is now 100% waterproof. The technology repels water and stops seepage to form an impenetrable barrier against moisture that means Moduleo LayRed is the ideal flooring solution for high humidity areas, bathrooms and kitchens. With its integrated underlay and rigid core, it can be installed on top of old floors and uneven substrates .

Stylish safety footwear range enables women to move effortlessly from office to site

uvex has introduced the uvex 1 x-cite, a stylish new footwear range designed specifically for women who need to transition between corporate and operational environments with ease.

From site managers and engineers to architects, logistics coordinators, production supervisors and facilities teams, uvex 1 x-cite offers a sharp, modern look that complements uniforms and office clothing while delivering the protection required on the shop floor.

The uvex 1 x-cite collection proves there is no need to compromise on style when it comes to safety. Designed to transition effortlessly from office to site, it combines a smart, contemporary design with trusted protective features. The sleek, professional look pairs naturally with both uniforms and modern business attire, allowing wearers to maintain a polished image without sacrificing safety.

Every element has been shaped with women in mind. Built on a true female last, the shoes provide a refined fit and tailored silhouette, available in sizes 2-10 with multiple width options to ensure inclusivity. Discreet safety features include a lightweight, metal-free carbon-fibre toecap and flexible anti-penetration midsole, which together reduce weight, increase flexibility and help minimise fatigue during long shifts.

The design strikes the perfect balance between edgy, chunky styling and all-day wearability. Certified slip-resistant and ESD-compliant, uvex 1 x-cite delivers protection that meets the demands of modern workplaces while maintaining a fashionable, versatile aesthetic.

The range has already earned recognition, winning the 2025 German Design Award and Red Dot Product Design Award for its elegant styling and comfort.

Available in a choice of low-cut shoes, Chelsea boots and high-cut boots, uvex 1 x-cite provides versatile options to suit different tastes and professional roles.

"Women shouldn't have to choose between safety, comfort and style," says Clair Weston, Head of Marketing at uvex. "With uvex 1 x-cite, we developed footwear on a female last, reduced weight and created a contemporary silhouette that allows professionals to go from the office to the site without interruption."

www.uvex-safety.co.uk/en

JR8

Don't miss elementalLONDON on 19-20 November

elementalLONDON, taking place at Excel London on 19-20 November, is set to become the leading UK event for built environment professionals tasked with advancing the efficiency of buildings.

This show is aimed at the architects, designers, engineers, consultants, system integrators and service providers who make buildings function better. With 200 exhibitors and 4,000 visitors expected, elementalLONDON is the place to explore cutting-edge design solutions, building automation and energy optimization, all in one location. A standout feature will be The HAUS, a two-storey live build inside the exhibition hall demonstrating how integrated low-carbon HVAC, controls and offsite construction techniques can work together in practice.

Five specialist theatres – the elementalARENA, Climate Solutions Theatre, Housing Hub, and CIBSE's Synergy and Influence Theatres – will host expert discussions and leading speakers, including:

- Architect Michael Pawlyn on regenerative design
- The Construction Inclusion Coalition on diversity in the built environment
- Bill McQuade (ASHRAE) on Healthy Buildings
- The Construct Zero Group on Designing for Net Zero
- A RIBA panel on future building typologies
- BE:ST presenting Scotland's low-carbon innovations
- A roundtable on Decarbonising London
- Phil Steele (Octopus Energy) on The Electric Future
- The Great Heat Network Debate featuring funders, clients and technologists

elementalLONDON is supported by more than 30 industry partners, including CIBSE, RIBA, RICS, BESA and BEAMA.

Visit elementallondon.show for the full programme and register for your FREE ticket today: ***https://forms.reg.buzz/elemental-london-2025/abcd-editorial-nov***

JR9

elemental LONDON

19-20 November 25
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management of dead legs and blind ends in *water systems*

***Roy Sullivan**, Senior Consultant at the Water Hygiene Centre, takes a look at the differences between dead legs and blind ends and shares some practical tips for managing them...*

There is a requirement for all building managers to ensure the safety of the public and employees so far as reasonably practicable. This requirement is set out in the Health and Safety at Work Act 1974, The Management of Health and Safety Regulations 1999, Control of Substances Hazardous to Health (COSHH) 2002, the HSE's ACoP L8: "Legionnaires' disease, the control of legionella bacteria in water systems", the associated HSG274 Technical Guidance Part 2: "The control of legionella bacteria in hot and cold water systems" 2014 and the Department of Health's HTM 04-01 "Safe Water in Healthcare Premises" Parts A, B and C, 2016.

What are dead legs and blind ends?

The Health Technical Memorandum 04-01 Part B defines a dead leg as a length of pipework leading to a fitting through which water only passes infrequently when there is a draw-off from a fitting, creating potential stagnation. HTM 04-01 Part A Section 12.5 sets out guidance that pipe branches should be designed to avoid stagnation. As far as practical, the maximum length of any pipework between a terminal device and a recirculating system or a cold-water distribution mains should be kept to a minimum; generally, the complete length of the spur should not exceed 3m. The length is measured from the centre line of the circulation pipework to the point of discharge along the centre line of the pipework. These pipes should be insulated.

A blind end is defined in HSG274 Part 2 as a length of pipework that is closed at one end through which no water passes. For example, where a wash hand basin in a room has been removed, allowing the room to be used as a store or office, the basin supply pipework may be capped off, leaving lengths of pipework containing stagnant water and creating blind ends on the hot and cold water services.

Both blind ends and dead legs increase the risk of biofilm formation and create the right conditions for Legionella, Pseudomonas aeruginosa, and other waterborne pathogens to proliferate. These waterborne pathogens may then leach back into the parent supply and contaminate the system, thereby increasing the health risk to anyone using the water system.

Biofilm is defined as a complex layer of microorganisms that have attached and grown on a surface. This form of growth provides a niche environment for a wide range of microorganisms to interact, where the secretion of exopolysaccharides by bacteria forms an extracellular matrix that protects both bacteria and other unicellular organisms, such as amoebae and flagellates. The internal surfaces of pipework, water tanks, water outlets, shower heads and hoses are a few examples where biofilm can form.

How can they be managed?

Where water is allowed to stagnate, there is a risk of contamination. The key elements of managing the pipework distribution system are to keep the system clean, keep the water flowing, and keep the hot water hot and cold water cold. In addition, the following points should also be considered;

1. Ensure the Legionella risk assessment, schematic drawings, and as-fitted drawings are up to date and reviewed.

Continued on page 26...

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JR10

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BS8580-1: 2019 Section 10.1 gives guidance as to when a risk assessment needs to be reviewed.

The original risk assessment should be formally reassessed when there are significant changes to ensure that it remains valid, for example, when there are:

a) changes to the water system or its use;
b) changes to the use of the building or part of the building in which the system is installed;
c) changes to the availability of information about risks or control measures;
d) indications that control measures are no longer effective;
e) any of the factors in Clause 4;
f) new construction works or system modifications planned; or
g) changes to the key personnel, contractors and service providers.

Where a reassessment has not been triggered by the above, a policy of planned reassessment should be implemented.

2. In existing buildings where the use of a room containing a water outlet is changed, requiring no water outlet, a reporting system must be in place to alert the relevant department, e.g. estates department to ensure all pipework to the outlet is removed, ensuring that any "T"s are removed, back to the distribution loop. In Healthcare facilities, the Water Safety Group (WSG) should monitor this regularly.

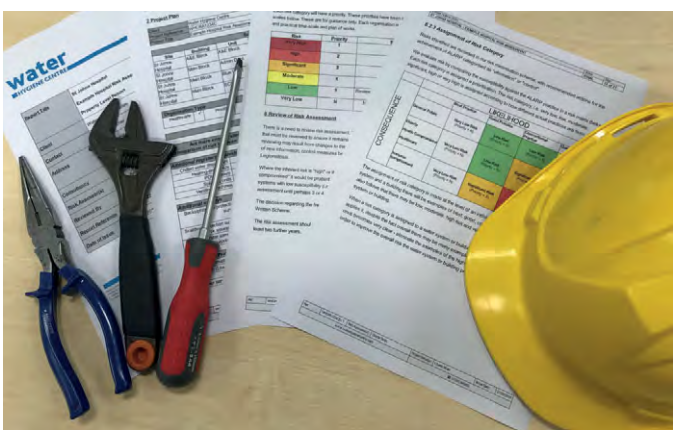
3. If the outlet is to be retained and is low use, then an appropriate Legionella flushing regime should be put in place. HSG 274 Part 2, table 2.1 sets out guidance on the management of little-used outlets with a weekly flushing regime or as indicated by the Legionella risk assessment. Healthcare premises HTM0401 describes an even more frequent flushing frequency, depending on the circumstances. It is essential to note that once a flushing regime has been implemented, it is sustained and accurate water safety records of flushing are maintained.

4. Where new buildings, extensions, or refurbishments are planned, there is a risk the new building, extension, or refurbished area may be left empty between the time the contractors have moved out and the users of the building have moved in. During this period, the area could become one large dead end. It is essential to have a robust flushing regime and microbiological sampling regime in place until the building is returned to normal occupancy and use. Typically, the FM service provider or Estates team is the incumbent interim party responsible for ensuring that the flushing regime is carried out. This period, where the building space may be unoccupied after project completion, should be managed in line with the protocol agreed upon by the Project Water Safety Group.

5. Where new builds or extensions are planned, it is essential to involve the Water Safety Group and the estate's operational teams at the earliest stage of design to ensure the proposed water distribution system and any associated primary heating sources are going to be fit for purpose including the minimisation of the risk of dead legs and blind ends. The creation and implementation of a Project Water Safety Group (which feeds into the main WSG) is vital to ensure that all aspects of water safety are considered, risk assessed, reviewed, ratified and agreed upon before any project works are undertaken. Project governance is key.

6. In design, there needs to be certainty that on completion of the pipework, the water outlets, particularly stand-alone water coolers, dishwashers, washing machines and specialised equipment requiring a water supply, are going to be fitted and used. If there is doubt regarding the equipment, consideration should be given to excluding the water service supply from the main contract and, if required, installing the water supply post-contract.

7. It is essential that the water commissioning records for any new building, extension or refurbishment are comprehensive and show the flow rates and temperature profiles for all outlets, water storage tanks and hot water generators. As fitted drawings, water system schematics, flushing records for when the building was unoccupied, commissioning data (including disinfection certificates), and Legionella risk assessments must all be available at the building handover from the main contractor.



JR218

WCSEE equipment selected for major wastewater upgrade

Anglian Water has completed the installation of specialist wastewater treatment equipment from **WCS Environmental Engineering (WCSEE)**. A total of ten WCSEE Hybrid modular biological treatment units and two Flocell XFMs for tertiary solids removal were put in place as part of a major upgrade of Horning Knackers Wood water recycling centre (WRC) in north Norfolk.

The water company was required to implement the solution to ensure dry weather flow at the works remained compliant, as river flooding and groundwater infiltration into the network was causing complications.

The conventional equipment in place at the WRC, which is sited in the riverside area of the village of Horning, had proven to be unsustainable due to changes in ground condition and the prevailing hydrology of the area. Soil in the region is predominantly peat over sand and gravel, which is porous and has low cohesion. This means it is subject to continual movement, which added pressure on the pipe joints. Combined with a high-water table, this had resulted in groundwater infiltration into the pipes, augmenting volumes, and increasing the challenge of meeting environmental consents at the works.

Anglian Water sought to implement measures to protect the integrity of its infrastructure and support wider drainage resilience, while ensuring the long-term water recycling needs of the Horning area.

WCSEE worked closely with contractor Kier to install, test and commission the wastewater equipment. To ensure the proposed solution aligned with the unique onsite challenges, WCSEE also conducted preliminary background work in collaboration with engineers, suppliers and logistics departments within Kier, including organising transport and manufacturing slots. This was carried out while maintaining open communication with the Anglian Water.

The upgraded WRC now has the capacity to treat flows of 25l/s, with a consent of 20mg/l for total suspended solids, 10mg/l for ammonia, and 10mg/l for biochemical oxygen demand – providing a retention time of greater than two hours.

James Greenwood, head of sales at WCSEE, said: “The contract demonstrates growing demand for adaptable wastewater treatment technologies from WCSEE, that give water companies greater flexibility in meeting the needs of tightening regulatory standards.”

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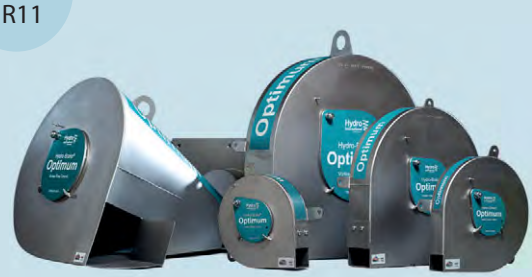
JR11



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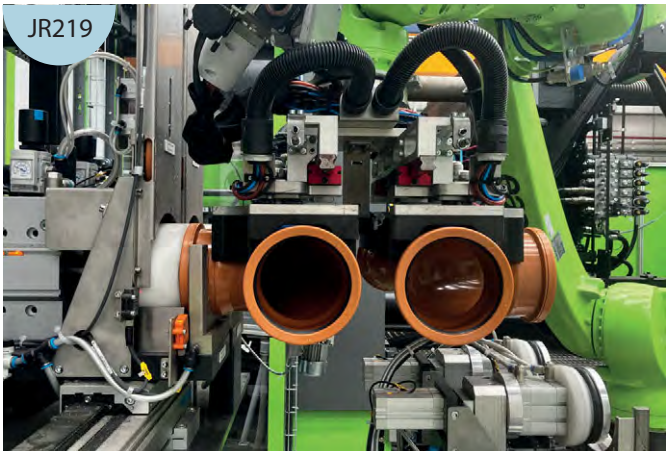

How manufacturers are ensuring leak tightness in drainage pipes and seals

There is plenty of talk about preventing leaks in below ground water and drainage pipes and the importance of good installation; however, ensuring the quality and long-term performance of these pipes starts well before they are actually installed.

British Plastics Federation (BPF) Pipes Group manufacturers make their products to recognised standards, both for the UK and internationally. In drainage pipes and fittings there are wide varieties of options to choose from but the manufacturing process is a vitally important part of ensuring these products are fit for purpose.

For example, in drainage, even non-pressure plastic pipes are tested before they leave the manufacturer.

Most BPF Pipe Group members' products are third party certified, such as Kitemark, and pressure testing is part of this. During the test, manufacturers apply up to 2° angular deflection, to allow for the pipe not being installed perfectly straight/level, as well as a diametric distortion test (squeezing the spigot by 10% and the socket by 5%) to make sure it can tolerate some differences in installation.

Not every product gets that test; but the requirements of the European Standards demand a test every 2-3 years, so plastic pipes are submitted regularly by pulling out a selection of random samples off the production line or from stock. In addition, this testing is repeated any time there is a change to the material or design of the product.

There is a second part to this testing too: how to ensure that every product leaving the factory is to the exact quality required. For many manufacturers automation is playing an increasingly important role in maximising the performance and quality of these products. By using camera vision systems to scan the inner and outer dimensions of seals for pipes and fittings made on injection moulding machines, the sophisticated system is programmed to pull out and reject any that do not meet the dimensional criteria.

So, an example is 110mm pipe seals. Thousands are produced and the advanced visual inspection system checks every single one. Then a robot takes this seal and assembles it to the fitting. It then pressurises the fitting for a few seconds to ensure leak-tightness. Any rejects are fed back into the recycled product chain so waste is absolutely minimal.

Once the products leave the factory and are installed, they should be air-tested once they're in the trench before and after backfill, in accordance with Building Regulations.

ESBE embarks on new education programme with YouTube star

Already well recognised in the industry as a manufacturer of top quality valves and other hydronic components, **ESBE** is in the process of establishing an important new collaboration regarding installer training, by teaming up with a young Croatian engineer who has a growing number of professionals and other followers who have embraced his unique style of delivering insights on heat pump installations.

Mario Dodic describes himself as an 'HVAC Educator & Trainer' and has a career path which makes him well qualified for the task, at a time when large parts of Europe – very much including the UK – are in urgent need of many more competent installers. Having completed a mechanical engineering degree in his native Croatia six years ago, Mario spent two years working for Ariston before joining Panasonic, in both cases having responsibility for technical support – covering design, installation and commissioning – across the Eastern Slavic countries. Then in 2023 he set up his own English language channel on YouTube to provide training specific to the heat pump sector, while now his HVAC Education Hub is set to gain a new following through working with ESBE.

Mario commented: "ESBE's valves are the best performing available and we will be looking to show how their operation suits heat pumps. The key point is heat pumps have very high flow rates and if you use the wrong valves they cannot cope with the high resistance and the system efficiency is severely compromised."
https://esbe.eu/uk

Buildingtalk

The online resource for building and construction professionals

Buildingtalk is a major online resource for building and construction professionals. For over a decade, it has offered news, product and technical specifications, as well as case studies, brochure downloads and videos from suppliers across the industry, plus free weekly news and product email updates.

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JR222

Bathrooms for all design needs

From guest bathrooms to city apartments and family bathrooms through to individually designed rooms that make their own statement, the **Duravit** bathroom furniture collection offers maximum design freedom and high-quality craftsmanship. With an extensive range of materials, finishes, and formats, Duravit offers solutions that work in a variety of decor styles and spatial situations. Whether it's premium wood decor, elegant marble look, glossy varnish, or structural glass: The wide selection of high-quality furniture finishes work in perfect combination with their bathroom sinks and mirrors, maintaining their beauty and durability even under high levels of humidity and heavy daily use.

Keller celebrates 90 years and new models for 2026 in new look magazine

Now, at 90 years old, **Keller Kitchens** offers the widest range colours and finishes in the European kitchen furniture market, along with a vast range of cabinet and accessory options, all produced by the most sustainable means possible.

At this time of year, Keller publishes the Keller Magazine to showcase the new products which will be launched in the January of the following year. 2026 will see the magazine also celebrating nine decades of craftmanship. Keller, a carbon neutral kitchen manufacturer since 2017 leading the way in environmental initiatives, has published the 76-page magazine full of history, new products for 2026, design inspiration, new colours, trends, bio-based kitchens and much more.

Tim Spann, National Sales Manager of Keller Kitchens, elaborates: "Reaching 90 years is a remarkable achievement, and we continue to set the standard in both design and sustainability. Our commitment to offering an unparalleled range of products – combined with leading the way with kitchen sustainability – is truly inspiring. This milestone not only celebrates craftsmanship and innovation but also highlights how tradition and environmental responsibility can go hand in hand. Congratulations to the entire Keller team on this impressive legacy and the exciting future ahead."

JR223

Marmox Multiboard used by NE renovation specialist to tackle damp and cold

A highly experienced contractor, specialising in energy upgrade refurbishments, underfloor heating and heating installations, has cited ease of installation, as well as the waterproofing and high insulation values of **Marmox** Multiboard, for his practice of using the coated XPS boards for all of his bathroom fit-outs and many other projects.

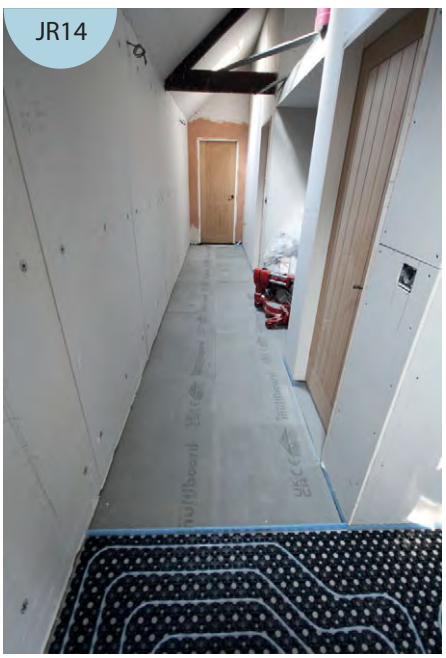
Richard Percy, a former firefighter, who has been carrying out challenging contracts across the country for the past 15 years and trading as RDP Solutions, recounts: "I work across the North-East and the country as a whole, for underfloor heating and greywater recycling and I have made it my speciality to take on refurbishments which other people say can't be done. In the case of the very old building where I am currently working in Mitford, Northumberland, the place had been very badly rebuilt in the past, with poor installation to the vaulted ceiling, no cavity closers and all of the pipework run under the floors. In addition, chipboard flooring had been laid over battens on out-of-level concrete. This required a full strip out to enable the installation of underfloor heating. Overlapping layers of Kingspan were installed in the roof-space and different thicknesses of Marmox Multiboard installed across the walls and floors in all the rooms. For example, I uprated all the window reveals using 12.5mm Multiboard."

During the rebuild, all of the pipework for the plumbing was relocated within the studwork, to allow the Uponor minitec underfloor heating system to be laid across a 40mm thickness of Multiboards. This ensured the maximum amount of heat was delivered to the occupied room above, creating much improved comfort levels for the occupants. Interestingly, as a proponent of hydronic underfloor heating, he has also adopted the practice of extending it beneath the actual shower tray: in this case, one of Marmox's own linear wetroom trays. Other products from the Marmox range employed on the contract include the jointing tape, 360 adhesive and special washers for installation of the different thicknesses of Multiboard.

Marmox Multiboards are manufactured from extruded polystyrene or XPS encapsulated in reinforced polymer concrete, produced in a range of thicknesses up to 60mm and offer a variety of positive physical characteristics in addition to being fully waterproof. They are both light to handle and easy to cut, while still being able to sustain substantial loadings if required.

www.marmox.co.uk

JR14



Transforming care home bathrooms

Spring Grove's Multipanel journey

Spring Grove Care Home, part of the Springdene group in Hampstead, North London, provides a welcoming and safe environment for its residents, many of whom live with Alzheimer's and other forms of dementia. With 46 rooms to refurbish, the care home faced a common challenge for independent living providers: how to upgrade bathrooms in a working care home with minimal disruption, while ensuring the spaces were hygienic, durable and low-maintenance. ***Multipanel*** *explains...*

The challenge – Modern bathrooms, minimal disruption
Renovating bathrooms in a live care environment comes with unique pressures. Residents' daily routines must be respected, and the project needed to avoid lengthy room closures. Traditional tiling methods would have required specialist trades, long installation times and ongoing maintenance – factors that could increase disruption and costs. Additionally, care homes require surfaces that resist mould, grime and leaks to ensure longevity and safety.

The Solution – Multipanel's innovative approach
Enter Multipanel, the UK's leading bathroom wall panel brand. Multipanel offers grout-free, fully waterproof panels that are FSC® certified and Made in Britain. With over 140 years of manufacturing experience and ISO 9001:2015 certification, the company combines reliability with innovation. Its Hydrolock® tongue-and-groove joint and 6mm tolerance allow panels to fit over uneven surfaces quickly and easily, reducing installation time by up to five times compared to traditional tiles.

Multipanel also offers versatile panel sizes – 598, 900 and 1,200mm – allowing flexibility for any bathroom layout. The MDF exterior core has Class 4 durability, ideal for areas exposed to prolonged water contact. With a 30-year warranty, care home managers can feel confident that bathrooms will remain hygienic, safe and low-maintenance for years to come.

For Spring Grove, the refurbishment started as a Free Trial bathroom installation, which included free wall panel products, installation and hands-on training led by Will, Multipanel's Business Development Manager and trained installer. This allowed the team to experience first-hand how the panels could streamline the refurbishment, saving both time and money.

Efficient, inclusive and stylish

Using Multipanel, each wet room at Spring Grove was installed in just 1.5 days by a team of multi-skilled tradesmen. This speed minimised disruption to residents and staff. The smooth, gloss surfaces are easy to clean, and the modern tile-effect finishes bring contemporary style to bathrooms without compromising on hygiene or accessibility.

Multipanel also aligns with inclusive design principles. Combined with slip-resistant vinyl wet room floors, the bathrooms meet Lifetime Homes and accessibility standards, making them safer for residents who require extra support. By simplifying cleaning and maintenance, Multipanel panels allow staff to focus more on resident care rather than ongoing repairs or deep cleaning.

Results and impact

To date, Spring Grove has successfully refurbished 12 bathrooms, with another 12 scheduled on a different floor. Plans are underway for the group's other sites: Springview in Enfield (59 rooms) and Spring Lane in Haringey (63 rooms).

The benefits have been immediate:

- Faster installation, reduced labour costs and shortened disruption
- Durable, low-maintenance surfaces promise long-term savings compared to traditional tiling
- Upskilled trades team increased project efficiency
- On-site logistics were streamlined, even in challenging locations

As Spring Grove staff noted: "The product has been great to install. Delivery was seamless, and the training allowed our tradesmen to upskill, speeding up the whole project. We're confident these bathrooms will remain hygienic and low-maintenance for years to come."

Why independent living providers choose Multipanel

Multipanel's panels help independent living providers combine practicality with modern design:

- Five times quicker to install than traditional tiles
- No grout, simple to clean, reducing long-term maintenance
- Durable Class 4 core for wet areas
- 30-year warranty for peace of mind
- Reduced adaptation times and cost savings for projects
- Inclusive and accessible, supporting safe and modern environments

Multipanel also supports sustainability. Its EPD-Certified panels can significantly reduce carbon impact compared to tiling. For a 75-bed care home, this equates to a CO_2 saving similar to running ten day trips by coach over 50 miles – a measurable difference for environmentally conscious projects.

enhancing flat roof resilience to mitigate the risk of *solar pv systems*

A roof that houses photovoltaic (PV) panel systems should last at least as long as the expected life of the renewable energy system – typically around 25 years. However, installing PV panels changes the risk profile of a commercial flat roof, which in turn can affect its lifespan. So here, ***Ieuan Compton****, International Strategic Marketing Manager on behalf of Georgia-Pacific, examines the risks and how enhanced gypsum core cover boards can help increase flat roof resiliency...*

The combination of the legislative drive towards greater energy efficiency, rising energy prices, and businesses' sustainability goals all mean that PV systems are becoming an increasingly common requirement for the design of new commercial premises with flat roofs.

While they bring many benefits, PV panel roofs pose extra challenges compared to standard roofs. So, it's important that architects and specifiers understand how to increase roof resilience.

Greater loading and increased foot traffic

When designing a commercial building with a flat roof that will house PV panels, increased loading and foot traffic should be factored into the design.

The additional weight of the PV panels and their method of attachment will need to be included in the structural calculations. Mechanically fixing PV panels to the structural deck helps transfer the load and reduces stress on the roof surface. If this isn't possible, PV systems can be ballasted or secured to rails, welded or bonded to the roof surface. However, the additional weight can compress the insulation layer, compromising thermal performance.

Once installed, solar panels need regular maintenance, increasing foot traffic on the roof. This can damage the waterproof layer and can also potentially compress the insulation.

PV panels equal a greater fire risk

There are 29 fires for every GW of solar capacity installed on average[1]. Commercial deployment of solar panel systems in the UK has risen 42% year-on-year[2], so it's likely the number of fires experienced will increase too.

If a fire does break out, the presence of PV panels changes its behaviour. The panels make fire harder to detect, and if the panels are below the optimum height, flames spread faster, too. The presence of the PV panels can hamper firefighting efforts because they can 'stay live' in daylight, making access dangerous. They also shield areas of the roof, making it difficult to extinguish the fire before it spreads, and they can add to the fire load, increasing potential losses. For this reason, insurer AXA states that PV panels must not be installed on combustible roofs.

Continued on page 34...

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Visit **www.fassabortolo.co.uk**
or call **01684 218 305**

JR15

FASSA BORTOLO

Damage from weather

All roofs are designed to protect the building from environmental factors; however, the presence of PV panels changes how the roof will perform when subjected to wind uplift. When wind blows parallel to a building's roof, it creates an area of low pressure above the roof surface. This negative pressure contrasts with the positive air pressure below the roof and creates suction that tries to lift the roof, or any equipment attached to it, such as solar panels.

Therefore, the design of a commercial PV panel roof needs to be resilient enough to resist wind uplift, no matter what the weather. Failure to do so could lead to costly damage to the roof and its PV systems with associated financial consequences for the business.

Another consideration is hail, as this can weaken certain roof materials such as flexible membranes. While this might not seem much of a concern in the UK, hailstorms are becoming more frequent, and hail itself is becoming bigger. On July 21, hail the size of golf balls fell in Leicestershire[3], so any roof must be designed to withstand the damage.

Increase roof resiliency with roof cover boards

Despite these risks, architects and specifiers should not be deterred from designing solar PV commercial flat roofs. These risks can all be mitigated with the addition of enhanced gypsum core cover boards to the roof build-up.

Cover boards serve as a smooth, robust and sturdy substrate that provides an extra layer of weight to the roof. This can help reduce surface deflection caused by heavy loads, stress on the waterproof layer and insulation compression. The boards also provide added puncture resistance for the waterproofing, reducing the risk of damage from foot traffic.

Choosing a cover board with a gypsum core that has a non-combustible, Euroclass A1 reaction to fire classification can help to improve the fire performance of the whole roof build-up. As well as reducing potential fire spread across the surface of the waterproofing layer, it will increase fire resistance and reduce the rate of fire penetration.

If boards are mechanically fixed through to the structural deck, the fixings can also increase the overall wind uplift resistance and robustness of the roof. There are also roof assemblies that have been tested and proven to provide resistance to hail strikes. These assemblies often include a flat roof cover board under the waterproofing to help provide additional support to the waterproof layer when it is subject to hail strikes.

As PV panel roofs become more common, understanding and addressing the associated risks from increased structural loads, foot traffic, fire and weather is crucial. High-performance enhanced gypsum core cover boards provide architects and specifiers with an effective strategy to enhance roof resilience and ensure the roof's longevity.

[1] *https://www.sciencedirect.com/science/article/abs/pii/S2352710221016107?via%3Dihub*
[2] *https://www.theuktimes.co.uk/solar-energy-installations-in-the-uk-hit-record-high-in-2025/*
[3] *https://www.bbc.co.uk/future/article/20220314-how-big-can-hailstones-grow*

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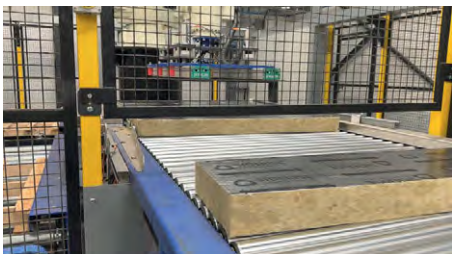


Siderise accelerates passive fire protection installation with new made-to-measure precision Cut Strip Service

To accelerate installation and enhance precision of its passive fire protection, **Siderise** has launched a new advanced Cut Strip Service – delivering ready-to-install, digitally sized cavity fire barriers and firestops for building façades. This innovative offering eradicates cutting onsite, reduces waste, and improves safety, helping contractors to achieve faster, more accurate, and more cost-effective installations. This marks a bold step forward in Siderise's mission to 'Go Beyond, contributing to safer buildings.'

Cavity barriers and firestops are often supplied in slab form for cutting to size onsite. However, through this new service, contractors can choose to have any Siderise CW, EW, RH and RV products pre-cut on Siderise's high-speed, automated production line to meet their exacting project requirements. This results in precision-cut products that have been digitally sized and manufactured under strict quality control measures, ensuring consistent quality and mitigating the safety risks and inefficiencies of onsite cutting.

But this isn't just about convenience. Using this service can save considerable time, effort and labour – therefore associated costs. To ensure contractors and project managers see these benefits in their project's bottom line, the Cut Strip Service has been carefully and competitively priced so that its cost is negated by the savings made from a more efficient installation process and reduced waste.

Siderise has developed the Cut Strip Service in direct response to growing demands for improved quality control in construction products, while also addressing global challenges related to site efficiency, safety, and the implementation of sustainable waste management practices on construction sites.

Additionally, using pre-cut strips may help installation teams better demonstrate alignment with project plans and drawings.

The Siderise Cut Strip Service is now available for all projects around the world, alongside standard slab supply.

www.siderise.com

LHC Procurement Group launches new £285m roofing systems framework

A total of 54 contractors have been appointed to the latest Roofing Systems and Associated Works (RS5) framework from **LHC Procurement Group** (LHCPG). As the next iteration of its successful RS4 framework, RS5 can be used by public sector clients across England, Scotland and Wales for all new-build, refurbishment, retrofit and emergency repair projects. It provides faster access to pre-approved roofing manufacturers and contractors. There is a larger selection of approved suppliers on RS5. The majority, 93%, are small or medium-sized enterprises (SMEs). This includes one micro, 29 small, and 20 medium-sized businesses.

"Not only does this offer greater flexibility and competition, but also ensures more regional delivery capacity," said Graham Collie, LHCPG's director of product innovation. "This supports local economies while maintaining manufacturer-approved quality and warranty assurance across all roofing projects, from standard renewals to innovative new roofing solutions or energy efficiency upgrades."

www.lhcprocure.org.uk

The role of insulation in rainscreen fire safety

Fire safety is likely front of mind for many specifiers and architects of rainscreen projects, as the construction industry grapples with changing regulations. Since 2018, fire safety regulations have continued to tighten, further restricting the use of combustible materials, increasing scrutiny of higher risk buildings, and putting greater accountability on everyone in the supply chain.

Many insurers, local authorities and clients are now going beyond regulations by requiring non-combustible[1] materials in the external building fabric as standard, regardless of building height or use. **Knauf Insulation** glass mineral wool and rock mineral wool products are non-combustible, with a Euroclass A1 or A2-s1,d0 reaction to fire classification, making them suitable for buildings of any height.

Passive fire protection is vital as it slows or stops the spread of fire. Correctly specified and installed insulation works with cavity barriers, fire stopping and other passive measures to help maintain that fire resistance. Prioritising non-combustible insulation and ensuring correct installation can deliver safer buildings while avoiding costly rework, project delays and legal risks.

See Knauf Insulation's rainscreen solutions:

[1]*As set out in changes to the building regulations 2010 which bans the use of combustible materials, limiting use of materials to those achieving A1 or A2-s1,d0 on buildings in scope of the ban (as defined in regulation 7(4)).*

FP McCann Thin Flat Duo Roof Tiles Installed on Manchester Care Facility

FP McCann has supplied its thin leading edge interlocking concrete roof tiles branded "Thin Flat Duo" to a brand-new care facility in Manchester.

On completion later this year, the 59-bed Upland Manor care home on Yew Tree Lane in Northern Moor, Wythenshawe, Manchester will replace the existing Yewtree Care Home. Client, Lovett Care Ltd in conjunction with Chester based property developer Liberty Care Developments are building the 3-storey modern facility.

Specialist commercial roofing company D&D Roofing Ltd has undertaken the installation of FP McCann's Anthracite concrete Thin Flat Duo tiles to provide a distinctive contrast to the brick finish to the building and to complement the adjacent residential housing development. In total, some 10,000 tiles have been supplied via Wakefield based builder's merchant Huws Gray Ltd.

Together with a small quantity of matching Anthracite ridge tiles, deliveries direct to site were from FP McCann's modern, state-of-the-art manufacturing facility in Cadeby near Nuneaton, Warwickshire and fitted by the skilled D&D Roofing Ltd team. FP McCann's stylish looking low-profile Thin Flat Duo tile is also available in Black, Brown and Rustic Red and features a smooth, non-textured finish and straight cut edge.

Commenting on the Thin Flat Duo tile installation, Sam Cousins, Contracts Manager for D&D Roofing Ltd says: "The low-profile Anthracite concrete tiles have given the extensive roof of the building a stand-out appearance as to the architect's specification. The concrete tiles were simple to fix with minimum breakage recorded. We will certainly consider using FP McCann's precast concrete roof tile range on future construction projects".

Further planned expansion at the fully automated Cadeby factory means the introduction of additional tile profiles. All FP McCann concrete roof tiles and accessories are of the highest standard and are covered by a 15-year Guarantee.

For sales quotations, email roofing plans to **roofing@fpmccann.co.uk**

JR18

Renson at the Old War Office: Historic elegance, modern air

The historic Old War Office (OWO), a Grade II* listed neo-Baroque landmark in central London, has undergone a remarkable transformation.

An example of adaptive reuse in architecture, where heritage meets modern sophistication. A pivotal element was the integration of Renson's innovative 450 and 480 louvres. These high-performance ventilation solutions played a crucial role in enhancing indoor air quality, energy efficiency, and aesthetic harmony, all while preserving the building's architectural integrity.

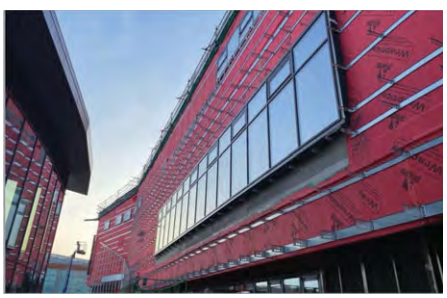
Balancing heritage with innovation

Transforming a historic structure into a contemporary space demands a delicate balance between conservation and innovation. Renson's louvres were seamlessly incorporated into the building's façade, offering discreet yet effective airflow management. This ensured optimal indoor climate control without compromising the grandeur of the original design.

By reducing reliance on mechanical ventilation systems, the louvres contributed to lower energy consumption-aligning with modern sustainability standards and demonstrating how heritage buildings can be future-proofed without sacrificing their legacy.

renson.net

JR19



Wraptite® membrane plays key role in Exeter's landmark Passivhaus leisure centre

St Sidwell's Point, in the heart of Exeter city centre, is the world's first Passivhaus-certified, multi-zoned leisure centre. The £44m, world-leading project includes the **A. Proctor Group's** Wraptite® external air barrier as part of the highly efficient external wall construction.

Wraptite is a self-adhered membrane, which is both airtight and vapour permeable membrane. Positioning it externally moves the airtightness barrier away from the internal services zone, simplifying detailing and reducing the number of penetrations. It is also a Passivhaus-certified component, reinforcing its credentials as a high-quality product that can help projects to meet the standard. To support its use, the A. Proctor Group provided a Wraptite toolbox talk on site, and conducted practical training using mock-up panels to demonstrate best practice installation.

The Passivhaus standard sets an airtightness requirement of 0.6 air changes per hour (ACH) at 50 Pascals pressure. As a pilot scheme for the Passivhaus Institute, a target for leisure centres of 0.4 $m^3/m^2/h$@50 Pascals was set for St Sidwell's Point. With the help of the Wraptite air barrier, it achieved a rate of 0.3 $m^3/m^2/h$@50 Pascals – the equivalent of an opening the size of 1¼ sheets of A4 paper across the whole building envelope. The result was a substantial achievement, and a demonstration that complex buildings can attain Passivhaus certification.

To verify the performance of the proposed wall build-ups, the A. Proctor Group technical team undertook a detailed hygrothermal analysis of the construction. The outputs from the assessment showed the hygrothermal characteristics through the facades. As such, it was possible to determine that the humidity levels within, and on the outer surface of, the insulation layer were below the 70% threshold at which condensation risks would be expected. In addition, the hygroscopic sheathing board stored the majority of any moisture accumulations, albeit these were low. This means the insulation's performance will not be reduced by excessive moisture uptake.

https://proctorgroup.com/

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sourcing energy efficient ventilation solutions for more *sustainable homes*

***Ruth MacEachern**, Product Manager at EnviroVent, looks at the importance of choosing energy-efficient ventilation solutions for both new builds and refurbishments....*

The need for energy efficiency throughout a new build or refurbishment has never been more important. Recent advances in ventilation systems means not only should they be selected for their ability to enhance indoor air quality but energy efficiency is also a key consideration.

Understanding energy-efficient ventilation

Ventilation systems are designed to regulate airflow within a building, ensuring optimal temperature and humidity levels, which is particularly crucial in new homes built to modern airtightness standards. While airtight homes are great for reducing heat loss, this can lead to issues with condensation and mould growth if not properly managed, therefore selecting the right ventilation system is essential for maintaining good indoor air quality.

How does ventilation optimise energy efficiency?

An effective ventilation system can help to reduce energy consumption by optimising airflow, therefore lowering the demand for heating and cooling, which can in turn lead to reduced energy bills.

When considering ventilation solutions for new builds or renovations, there are several systems to choose from, each with its unique benefits and applications.

Mechanical Ventilation with Heat Recovery (MVHR)

Mechanical Ventilation with Heat Recovery (MVHR) systems are whole house solutions that continuously extract stale, moisture-laden air from wet rooms and supply fresh, filtered air to living areas. These systems include a heat exchanger that recovers a high percentage of heat (up to 93% thermal efficiency in some models), which significantly improves energy efficiency.

When seeking energy efficient ventilation systems, housebuilders must also achieve compliance with Approved Document O of the Building Regulations, which focuses on mitigating overheating in homes.

Look for MVHR units that feature an automatic summer bypass function that diverts air around the heat cell during warmer

Continued on page 42...

Perfect partners for **Low Temperature Heating**

For the widest range of **Low Temperature Heating Solutions**, it has to be MYSON

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Heating systems are increasingly being designed with lower flow temperatures to help decarbonise buildings. To maximize impact, it's crucial to choose the right heat emitters and user-friendly controls for precise temperature management.

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JR21

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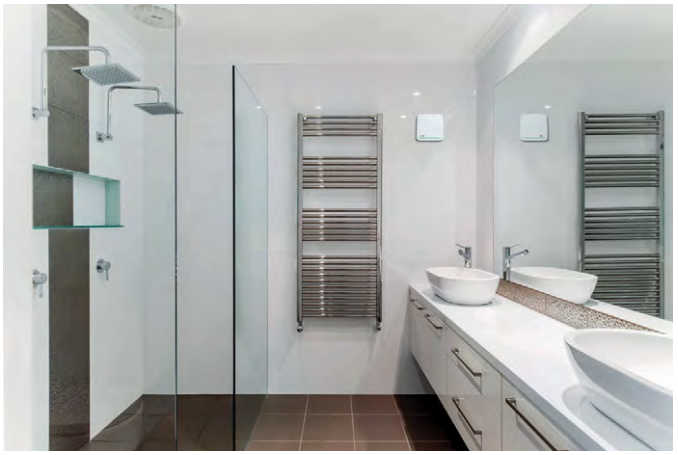

JR236

periods, which prevents overheating, therefore helping to stay compliant with Approved Document O.

Mechanical Extract Ventilation (MEV)

MEV systems are designed to extract air from specific areas of the home, such as kitchens and bathrooms, where humidity is at its highest. These systems can be either centralised or decentralised, depending on the layout of the property. MEV systems offer adjustable fan speeds, which allow for optimisation based on occupancy or room usage.

Popular in smaller homes, MEV systems also offer minimal energy consumption compared to traditional systems.

Positive Input Ventilation (PIV)

Positive Input Ventilation (PIV) systems create healthy living environments by supplying fresh, filtered air throughout a property at a continuous rate. A popular method of whole house ventilation, they work by drawing in fresh, filtered air from outside. These can be either installed in a loft space or on a wall in a flat or apartment. They ensure that a continuous supply of air is supplied into the home to eliminate or significantly reduce condensation.

PIV systems are also energy efficient as they use low-power fans to maintain airflow, with many systems designed to meet energy performance standards for Sustainable Products Regulation.

Performance and compliance

Selecting the right energy-efficient ventilation system involves careful consideration to ensure optimal performance and compliance with Building Regulations.

Firstly, the building's design and layout of the home play a crucial role in determining the most suitable ventilation system. Factors such as the size of the property, the number of rooms and the presence of wet areas should all be taken into account. This is also particularly important when it comes to compliance with Approved Document O, as the orientation, shading and material usage can have a significant impact on overheating and user comfort if not effectively planned out. This can lead to more work and cost being required further on in the project.

Ventilation systems must comply with the latest building regulations Approved Document F and have been tested for performance. Higher efficiency ratings often translate to lower energy consumption and cost savings over time.

In terms of budget, investing in a high-quality, energy-efficient system can lead to significant savings in the long run, especially when you take into account ongoing maintenance and energy consumption. Check out manufacturer warranties and their support service contracts in case of any issues.

It is also worth considering that homes that are equipped with energy-efficient features, including advanced low carbon ventilation systems, which make them more attractive to potential buyers.

Energy efficient ventilation systems

The importance of selecting energy-efficient ventilation solutions for homes cannot be under estimated.

The updated Approved Document F and Future Homes Standard (FHS) demand ever higher whole-house ventilation rates and increased airtightness in new homes to reduce carbon emissions. This means that traditional methods like natural ventilation using intermittent fans and trickle vents are inadequate for meeting the new regulations.

This can be achieved through a 'systems approach' to ventilation, where a continuous flow of fresh air and removal of pollutants are essential to maintaining optimal indoor air quality. This is achievable with whole-house ventilation systems, such as MVHR (Mechanical Ventilation with Heat Recovery), MEV (Mechanical Extract Ventilation), dMEV (Decentralised Mechanical Extract Ventilation) and Positive Input Ventilation (PIV).

By working closely with ventilation manufacturers from an early stage, housebuilders can make informed decisions that result in greater energy efficiency, better indoor air quality and sustainable, low carbon homes for the future.

JR22

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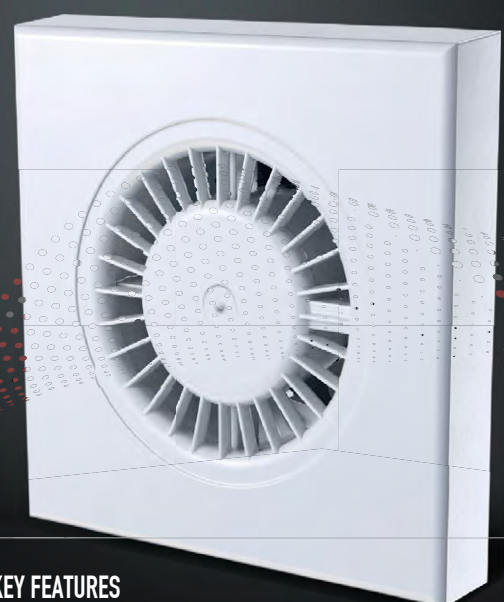

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- Ease of installation
- Quiet running
- Compliant with current Building Regulations

JR24

JR238

Modern efficiency meets heritage at Corpus Christi College with Hamworthy Heating

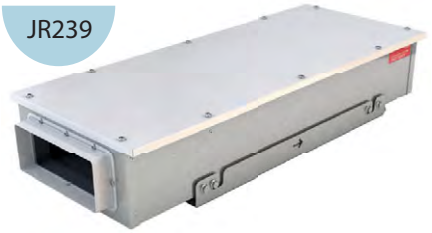
Hamworthy Heating has supplied its Modumax mk3 modular condensing boilers and Powerstock calorifiers to Corpus Christi College, University of Cambridge. Installed within a Grade I Listed building; the new system delivers an efficient heating and hot water solution tailored to the unique challenges of the site. The project involved replacing an ageing plant room in the basement of the college, where access was severely restricted and space limited. These constraints ruled out traditional large-scale plant equipment and required a compact system that could be transported through narrow doorways without structural alterations. The chosen system features four Modumax mk3 floor-standing condensing boilers (196 / 392V) delivering 1,532 kW total across eight modules. These are integrated with two Hamworthy Heating Powerstock PS500 indirect calorifiers.

Consort Claudgen includes Wi-Fi enabled heaters in LST range

JR240

Consort Claudgen offers Wi-Fi-enabled low surface temperature heaters in its LST range, controllable via a digital control panel or the Consort Connect app. Key features include a 7-day timer with 24 daily heating periods, lock function, open window detection, custom automation, and energy consumption statistics. Models with occupancy sensors feature a self-learning control system that detects and understands a user's weekly presence in a room. It develops a heating schedule and automatically warms the room based on detected or predicted occupancy. When the space is unoccupied, the heater conserves energy by switching to a setback temperature or frost protection mode. Consort's website also offers BIM objects for download.

JR239



Domus Ventilation in-line filter improves indoor air quality

Domus Ventilation's NOX-FILT in-line carbon filter is designed to improve indoor air quality by preventing harmful airborne contaminants, including up to 99.5% of nitrogen dioxide (NO^2) pollution, from entering a home. A further unit, the NOX-FILT2.5, has a pre-filter to maximise the filtration of PM2.5. With safe levels of NO^2 and PM2.5 regularly breached in the UK, these pollutants are a major cause for concern to public health having known links to allergies, asthma, lung cancer, COPD, cardiovascular disease and even dementia. Designed to work on the supply leg of the ducting system of a MVHR systems (including Domus' HRXE range), NOX-FILT works seamlessly with the system to deliver fresh, filtered air into the main living areas of homes. A low profile means it readily fits into restricted spaces.

JR241

Gilberts' top-level approach to helping reduce hospital waiting lists

Hospital operations in Bradford are set to increase with input from **Gilberts Blackpool** contributing towards a new NHS surgical day case unit.

The roof-top plant necessary to operate the unit at St Lukes Hospital for Bradford Teaching Hospitals NHS Foundation Trust is being screened by over 500m^2 of Gilberts weather louvres (WGK75).

In a complex configuration, the core 102m long x 3.5m high screen, powder coated in matt signal black, runs the entire perimeter to provide an attractive ground-level aesthetic to visitors to the facility and a degree of protection from the elements for the plant behind.

An additional L-shaped 44m louvre within includes insulation, doors and a cat ladder to minimise sound from and allow maintenance access to the equipment needed to power the two-storey unit and its two operating theatres.

https://gilbertsblackpool.com/

ACV UK expands CIBSE-approved CPD portfolio with new module on Commercial DHW Systems

JR242

ACV UK has expanded its CIBSE-approved CPD portfolio with the launch of a new module: What You Need to Know – Commercial DHW Systems Now and for the Future. Designed for building services professionals, the new CPD helps consultants, specifiers and contractors navigate the fast-moving landscape of domestic hot water (DHW) system design in commercial buildings.

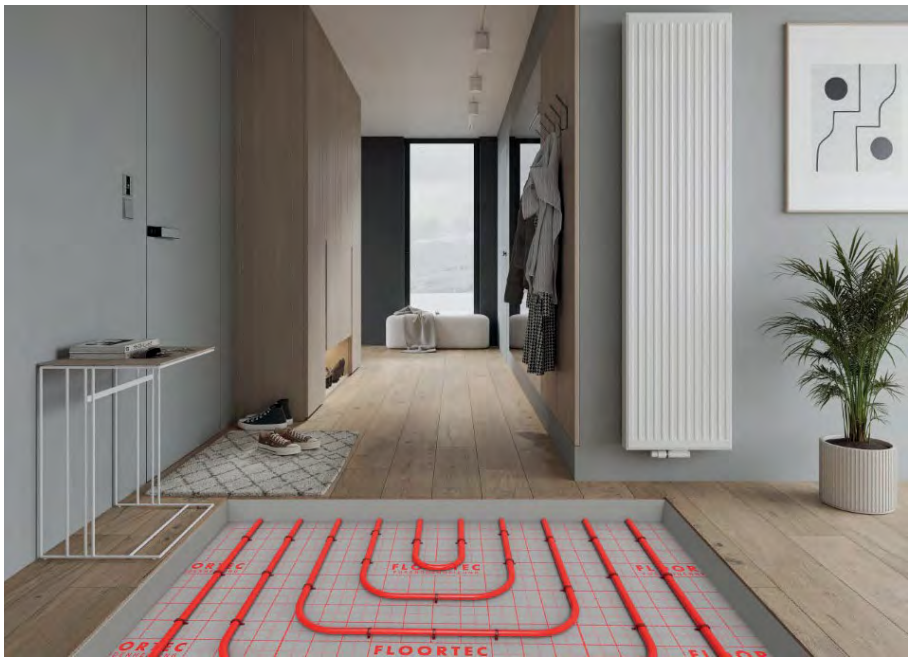
With the need to comply with updated regulations and improve system efficiency, the new CPD explores how market demands are shifting and what that means for modern DHW system specification. It also covers key drivers such as changes to Part L, the expanding range of available technologies and how to approach system design in a way that balances carbon reduction, reliability and cost. Participants will also gain insights into demand profiling, system sizing, hybrid strategies and practical considerations such as site constraints and long-term operational performance.

To suit busy working schedules, the CPD lasts 45–60 minutes and can be delivered in person, online, or at ACV's Expert Academy Training Centres.

The new module complements ACV UK's existing portfolio of CIBSE-approved CPDs.

www.acv.com/gb/page/cibse-accredited-cpd-course

Tailored Solutions for Low Temperature Heating



With the UK focus on decarbonising building stock, low temperature heating (LTH) is increasingly recognised as a key solution. But achieving real efficiency and comfort goes beyond simply lowering flow temperatures – it requires the right combination of emitters, controls, and system design.

David Relihan, Vice President of Myson UK, says: "At Myson, we offer a complete range of LTH-ready products, helping specifiers and installers to build systems that are efficient, adaptable, and user-friendly."

Why choose low temperature heating?

"Lowering flow temperatures to around 45°C, particularly when combined with good insulation, can reduce energy consumption by up to 30%" explains David. "But the benefits go beyond savings."

• *Versatile heat sources:* Low temperature heating systems work with condensing boilers and are fully compatible with renewables, like heat pumps and solar thermal.

• *Higher comfort*: Low thermal inertia emitters respond quickly to demand and distribute heat more evenly.

• *Design value:* Radiator replacements or underfloor heating installations offer opportunities to enhance interiors and increase property value.

Radiators to suit every space

According to David, "Underfloor heating is very effective and often the first thought for low temperature heating systems, but most radiators, when correctly sized, are equally suitable. Various types and models are available, each with their own features and benefits."

• *Hydronic radiators* in panel, column, and designer styles, with horizontal and vertical options available to suit any interior.

• *Ulow E2:* a smart panel radiator with integrated fans for better convection at ultra-low temperatures.

• *iVector S2:* a powerful fan convector with heating and cooling functionality – ideal for pairing with heat pumps.

• *Towel Warmers:* the stylish Topaz double ladder rail delivers excellent output even at low temperatures.

• *Electric radiators:* an ideal solution for intermittent use or integration with solar PV.

David says: "A combined system with both underfloor heating and radiators can offer an even more complete solution, with many advantages, so it's worth considering."

Smart control for smarter heating

"A common concern with low temperature heating systems is slower warm-up times, but this can be addressed with smart control strategies," continues David. "Maintaining set-back temperatures when spaces are unoccupied ensures faster recovery."

Myson's Unisenza Plus wireless control system allows users to monitor and adjust room temperatures via a simple online app, from anywhere at any time, helping optimise comfort while reducing energy use.

From radiators and underfloor heating to heating valves and electronic controls, Myson provides a full system offering for every application, helping professionals to build efficient, reliable, and tailored low temperature heating systems, without compromise.

For more information visit **www.myson.co.uk**

MYSON

low carbon heating and the future of *housebuilding*

***Tom Brough**, GTC Sales and Marketing Director, offers an insight into digitalisation and low carbon housing...*

The UK housing sector is at the forefront of a digital transformation, as the nation pushes towards a sustainable, net-zero future. Digitalisation is reshaping the way homes are built, managed, and lived in, playing a pivotal role in reducing carbon emissions and enhancing energy efficiency.

By leveraging smart technologies, digitalisation enables seamless integration between low-carbon heating systems, the electricity grid, and user interfaces, making sustainable living both practical and accessible.

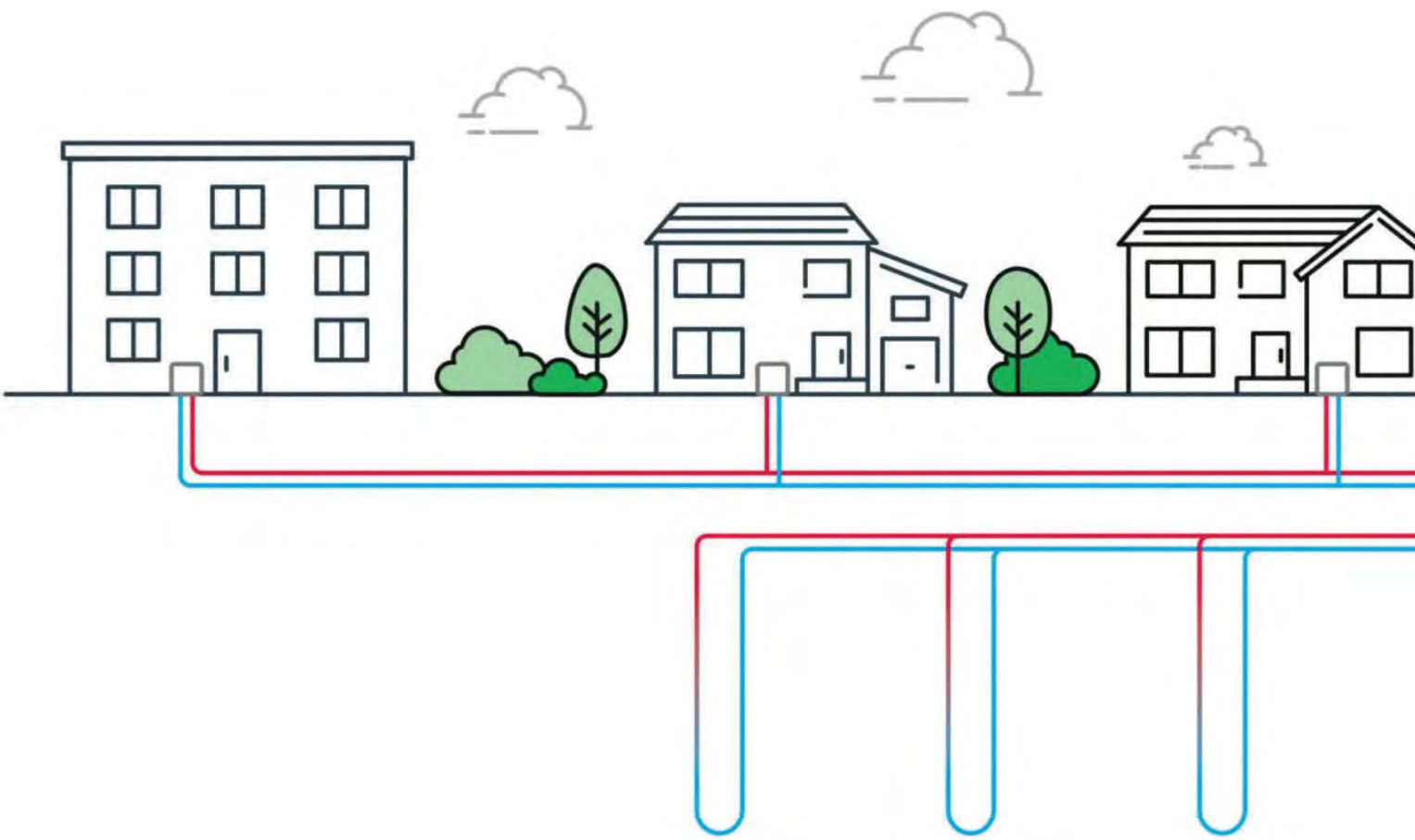
The role of digitalisation in decarbonising the UK housing sector

Digitalisation is transforming the UK housing sector by enabling data-driven insights, automation, and connectivity between systems. This shift plays a significant role in decarbonising homes, aligning with the Future Homes Standard, which mandates new homes to achieve high energy efficiency and low-carbon emissions. With the help of digital technologies, energy-efficient heating systems can now operate in harmony with the electricity grid, balancing energy demand and supply while giving users greater control over their consumption.

Heating, which traditionally depended on carbon-intensive sources, has become a critical area of focus in this digital transformation. Low-carbon heating systems like Networked Ground Source Heat Pumps and Community Heat Hubs, when coupled with smart technologies like a Passiv Smart Thermostat, create sophisticated ecosystems where data is used to optimise energy use, enhance comfort, and support grid stability. Through this digital integration, homes can achieve high efficiency without placing undue strain on the grid, making electrification sustainable at scale.

Networked Ground Source Heat Pumps: a digital-ready, low-carbon solution

Networked Ground Source Heat Pumps, when installed as part of a smart bundled solution, can meet the demands of modern, digitalised homes. Networked Ground Source Heat Pumps work by extracting thermal energy stored in the ground, which is then



amplified by a heat pump to provide consistent, efficient heating. As an electrically driven system, Networked Ground Source Heat Pumps represent an essential component of electrification efforts, but their digital capabilities are what truly enhance their value.

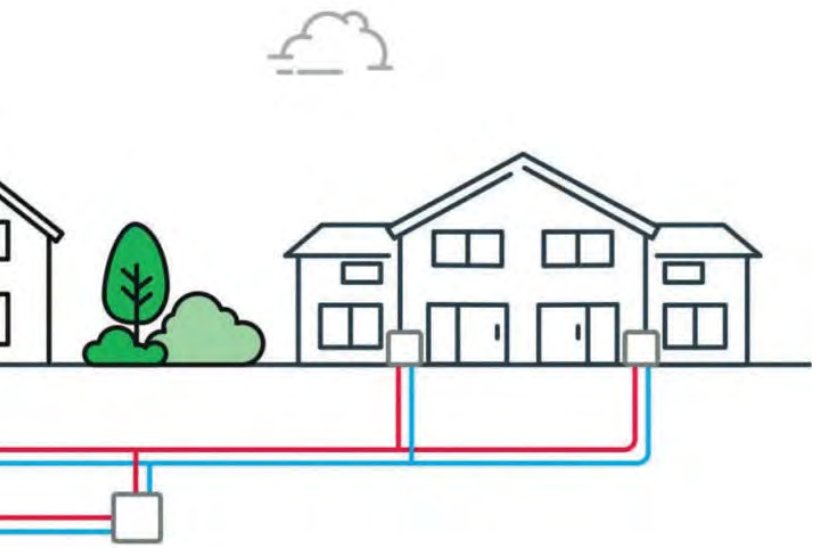
When integrated with smart thermostat technology, Networked Ground Source Heat Pumps enable residents to set their comfort levels. The device then optimises the homes energy use in real-time, making informed adjustments. This removes the need for manual adjustment, creating a seamless, easy-to-use home energy management system.

This smart technology also contributes to grid stability by allowing homes to respond to demand-side incentives. For example, users can be incentivised to reduce their heating demand during peak times, reducing pressure on the grid and lowering overall energy costs. This level of digital flexibility makes homes future-proofed, supporting not only today's energy needs but also those of a rapidly evolving, decarbonised energy landscape.

Community Heat Hubs: centralised, digitalised heating for larger developments

Community Heat Hubs bring low-carbon heating to multi-unit developments and urban communities, where individual heat pumps may not be feasible. Community Heat Hubs use a shared heat network to distribute renewable heat to multiple homes, centralising energy use and creating efficiencies that align well with grid demands. Through digitalisation, Community Heat Hubs offer even greater benefits, with smart systems that allow for heat demand to be controlled, monitored, and balanced across the development.

By integrating Community Heat Hubs with Passiv's digital energy management platform, a cohesive, adaptable system is created that operates efficiently at scale. The digital energy management platform provides real-time data on energy consumption across the Hub, enabling responsive heat distribution that matches both user demand and grid capacity. This digital integration also offers housebuilders a scalable, future-ready solution that supports both cost efficiency and compliance with sustainability standards, making it easier to create smart, low-carbon communities.



Benefits for housebuilders, residents, and the grid: a digital ecosystem for low-carbon living

Combining Networked Ground Source Heat Pumps and Community Heat Hubs with smart thermostat technology creates a digital ecosystem that benefits housebuilders, residents, and the grid alike:

- *For housebuilders:* Digitalised heating solutions provide a direct path to compliance with the Future Homes Standard, reducing the complexity of regulatory requirements while delivering enhanced value to prospective buyers. Networked Ground Source Heat Pumps and Community Heat Hubs, coupled with smart controls, make new homes attractive to modern buyers seeking environmentally friendly, tech-enabled features.
- *For residents:* Digitalisation offers unprecedented control and transparency, enabling residents to interact with their heating system in meaningful ways. Smart thermostats allow users to set heating preferences, track consumption, and make data-driven adjustments, creating a balance of comfort and cost-efficiency. By taking charge of their energy use, residents can significantly reduce their environmental impact while enjoying a high standard of living.
- *For the grid:* As electrification progresses, the ability to manage energy demand digitally is invaluable for maintaining grid stability. Networked Ground Source Heat Pumps and Community Heat Hubs, enhanced by intelligent energy management, allow for demand to be spread across off-peak times, reducing load during peak hours. This digitalised demand management helps balance supply and demand, making the grid more resilient and adaptable as it supports the transition to renewable energy sources.

Towards a digitalised, low-carbon future in housing

Low-carbon, digital-ready heating solutions are shaping the future of sustainable housing in the UK. Through Networked Ground Source Heat Pumps and Community Heat Hubs, homes are being created that meet the UK's electrification and decarbonisation goals, supporting a seamless, data-driven experience for housebuilders, residents, and communities.

By embracing digitalisation, the UK housing sector can accelerate its journey to net-zero, creating homes that are not only energy-efficient but also intelligent, adaptable, and ready for the future. Through innovation and forward thinking we are helping to build a resilient, low-carbon housing market that benefits everyone – from developers and residents to the energy grid that powers the nation.

ENQUIRIES VISIT www.abcd-info.co.uk EMAIL korucirculation@c-cms.com POST use address card

Innovative Gap House project transforms disused garages into affordable homes

A council-owned, disused garage plot in Bristol has been revitalised to create affordable housing thanks to the innovative Gap House concept. The nine one-bedroom, two-storey sustainable homes on Bell Close, Horfield, for social rent, are now complete, with the first residents beginning to move in.

Designed by architects and landscape architects at **BDP** and built by contractor Beard and SIP (structural insulated panel) specialist Etopia, the homes were commissioned and funded by Bristol City Council.

BDP originally showcased its Gap House concept design at the Housing Festival Expo in Bristol in 2018, as a proposed way of helping to address the city's need for housing and revitalising neighbourhoods.

The homes have been built using modern methods of construction (MMC), with factory-made panels used to create the external walls of the homes. The use of MMC helped overcome the challenge of building on a tight, urban site with limited access.

Councillor Barry Parsons, chair of the Homes and Housing Delivery Committee at Bristol City Council, said: "Creating safe and healthy neighbourhoods, with affordable, high-quality homes is one of the council's key priorities, and working with partners is key to helping us achieve these goals. These nine new homes will be a real asset to the council's housing stock and allow us to make a real difference to the lives of nine households in need of an affordable home.

"Using innovation and MMC, the Gap House concept has allowed us to build vital homes on a difficult site with limited access. I am also delighted that the new homes are low energy and sustainable, which will result in cheaper energy bills for future tenants."

Each home will be energy efficient, cheap to run and have a low environmental impact, thanks to low energy lighting, high levels of insulation, minimal heating requirements and renewable energy generated by solar PV panels and air source heat pumps.

The homes include an open-plan kitchen-living area and a bathroom on the ground floor, with a bedroom and storage on the first floor. Large windows allow for maximum natural light. The entrance to each property has been designed to promote a 'front porch culture' with green space and seating in front of each home to encourage social interaction and community cohesion.

www.bdp.com/uk

Go beyond social housing standards with Beauflor

In social housing projects ensuring your choice of floor complies with health and safety regulations is an essential part of the specification process. With **Beauflor** sheet vinyl flooring for social housing, no matter which floor you choose you are guaranteed full health and safety compliance. Beauflor sheet vinyl floors are made in Belgium to be an affordable option for social housing projects that is fully compliant with all health and safety requirements. Importantly, they can be used to provide a durable, easy to maintain, hygienic and slip-resistant surface that helps to provide tenants with a supportive home environment. With almost four in five tenants moving into their homes with either partial or no floor coverings and a lack of covering affecting tenants physical and mental wellbeing, Beauflor sheet vinyl floors are an affordable way for providers to improve the quality of accommodation. Beauflor sheet vinyl is safe and sure underfoot, thanks to a minimum R10 slip-resistance.

Beyond Care Homes: The Case for Growing Older at Home

With the UK facing a huge ageing population uptick, many individuals want to continue living in their existing homes rather than downsizing or relocating to retirement communities. **Stiltz Homelifts** provides compact, freestanding homelift solutions designed for easy ageing in place. This enables anyone to adapt their much-loved homes to meet evolving needs. Instead of relocating, homeowners can make thoughtful changes, such as installing a homelift, low-level kitchen or bathroom units, widening doorways and improving lighting for better in-home visibility.

Stiltz Homelifts, with freestanding, compact designs, provide an elegant solution to mobility challenges, enhancing accessibility and independence. This helps elders remain in their homes, surrounded by family and friends, with continued safe mobility between floors.

Ageing in place isn't just a want; it's a need for many individuals. By focusing on home adaptations, it is possible to create environments where older adults thrive. This gives them the opportunity to continue contributing positively to their communities while preserving their memories and social connections. Through practical support, elders can remain in their homes and be a valued part of their neighbourhood for years to come.

www.stiltz.co.uk

Royal Town Planning Institute President visit to the Isle of Wight

The Isle of Wight Council recently hosted a visit from the **Royal Town Planning Institute (RTPI)** President.

The Royal Town Planning Institute (RTPI) Presidential Visits champion planning across the region. This year's visit to the Southeast welcomed RTPI President Helen Fadipe – accompanied by RTPI Southeast Chair Reece Lemon and regional board member Claire Tester – to Portsmouth and the Isle of Wight for two days.

The two-day visit was jointly hosted by two local authorities, Portsmouth City Council and Isle of Wight Council – both 'island' authorities with specific spatial challenges and opportunities – the visit centred the power of planning as a tool for progress.

On 23 October the team from RTPI, started their Island visit to the Isle of Wight by meeting the Council's Planning Team at their Seaclose Office. A walking tour of Newport Harbour preceded an evening networking event.

Three Oaks, Horsebridge Hill was on the agenda for a look at the 100% affordable major housing project in Newport. The project is a joint initiative between the Isle of Wight Council, Sovereign Network Group (SNG) and Captiva Homes. Together building homes that suit the needs of local people.

Iain Delaney, Chief Executive Officer, Captiva Homes: "Three Oaks is a project that delivers on so many fronts for Islanders. As well as 145 truly affordable homes, it's being delivered by local companies, which has supported jobs and created apprenticeships, it delivers a play park for the local community and, thanks to cooperation with SNG and the Isle of Wight Council, it's been delivered at pace.

Planning consent was issued in March 24, the first homes are ready for Island families to move in this month."

Iain continues: "When Captiva first brought this project forward, we set out to prove that local private sector developers could make a real difference to affordable housing delivery on the Island. The partnership secured with SNG has been instrumental in securing the £30m investment to deliver these homes and cross-function support from the Council & Island Roads has been critical to the timeline being achieved. Collectively, we are now delivering the largest affordable housing project the Island has seen in decades, and we are proud to be helping make a life changing difference to many Island families."

www.rtpi.org.uk

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JR27

the golden thread revolution:

harnessing information to transform fire door safety

In today's world, information is power, especially when it comes to fire safety compliance. As the industry enters an age where data is more accessible and transparent than ever, a golden opportunity arises to reshape how fire door safety is managed, documented, and maintained. ***Allegion UK*** *tells ABC&D more...*

From tragedy to transformation: The birth of the Golden Thread

The devastating Grenfell Tower fire in 2017 was a stark reminder of the consequences of inadequate fire safety measures. In response, Dame Judith Hackitt's review catalysed a comprehensive overhaul of building safety legislation, culminating in the Building Safety Act 2022.

One of the Act's landmark provisions is the introduction of the Golden Thread of Information, which is a continuous, accessible digital record that captures every decision, update, and piece of data related to fire and structural safety throughout a building's lifecycle.

This revolutionary framework is designed to ensure that building owners, developers, regulators, and residents all have timely access to accurate and verified information. This transparency drives

higher standards, fosters accountability, and ultimately saves lives.

Fire Doors: The first line of defence

Fire doors are a cornerstone of passive fire protection, designed to compartmentalise fire and smoke, slowing their spread and providing occupants crucial escape time. However, a fire door is only as effective as its components, all of which must be specified, installed, and maintained correctly.

The Building Safety Act recognises this and mandates that the Golden Thread must include comprehensive data on all fire safety systems in high-risk buildings, including fire doors and their hardware. This means duty holders must have confidence that every component is fit for purpose and compliant with UK Construction Products Regulations.

Empowering Duty Holders Through Transparency

To meet these stringent expectations, manufacturers have stepped up, providing detailed product datasheets, installation guides, and training portals as part of the Golden Thread framework. Decision makers can instantly access a product's Declaration of Performance (DoP), confirming compliance with testing standards and certifications such as UKCA and CE marks. Environmental Product Declarations (EPDs) also allow alignment with sustainability goals, reflecting the increasing importance of eco-conscious construction.

This wealth of transparent product information empowers duty holders to make informed choices, ensuring that installed fire door hardware will perform reliably when needed most.

Maintenance & compliance made clear

Traceability doesn't stop at installation. The latest amendments to Approved Document B in March 2025, reinforce Regulation 38, which requires that 'the person carrying out the work shall give fire safety information to the responsible person no later than the date of the completion of the work, or the date of occupation.' Providing this documentation enhances accountability and ensures that fire safety information flows seamlessly to those responsible for ongoing building management.

This clarity helps duty holders schedule maintenance appropriately, conduct regular inspections, and swiftly address any issues before they compromise safety.

Collaboration through clear communication

The Golden Thread is more than a record-keeping tool, though; it's a catalyst for collaboration. When information is accessible and unambiguous, stakeholders, from architects and contractors to building managers and regulators, can work together more effectively. This proactive culture shifts fire door safety from reactive compliance to strategic risk management.

For existing buildings, transparent product data allows decision makers to identify installed hardware, assess its suitability, and plan timely repairs or replacements, avoiding costly retrofits and enhancing occupant safety.

Streamlining decisions & building trust

Operationally, instant access to reliable product information streamlines decision-making. Duty holders can quickly address hardware issues, implement changes, and document actions, all within a shared digital framework. This holistic approach fosters trust among all parties involved, reinforcing that fire safety is a collective responsibility.

Seizing the golden opportunity

Traceability and transparency are no longer optional extras; they are industry expectations and vital tools in the ongoing quest to improve fire safety. Weaving a fabric of trust, transparency, and accountability by turning data into a powerful tool that protects buildings and, most importantly, the people within them. The Golden Thread represents a golden opportunity for the construction and facilities management sectors to elevate standards, reduce risks, and protect lives.

With extensive product information resources, including technical fitting instructions, certifications, and training, Allegion UK helps professionals make informed choices at every stage, from specification to installation and maintenance.

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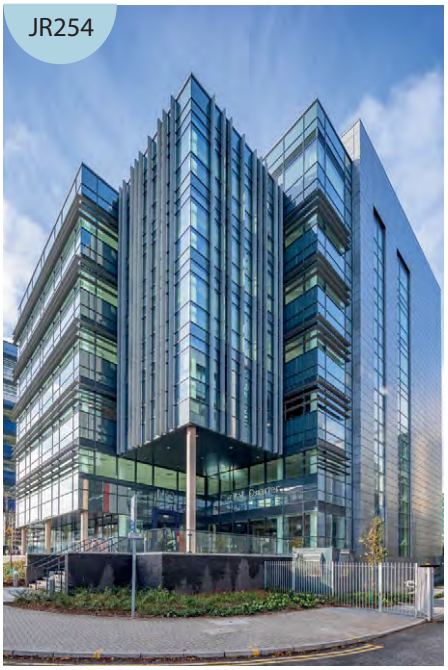

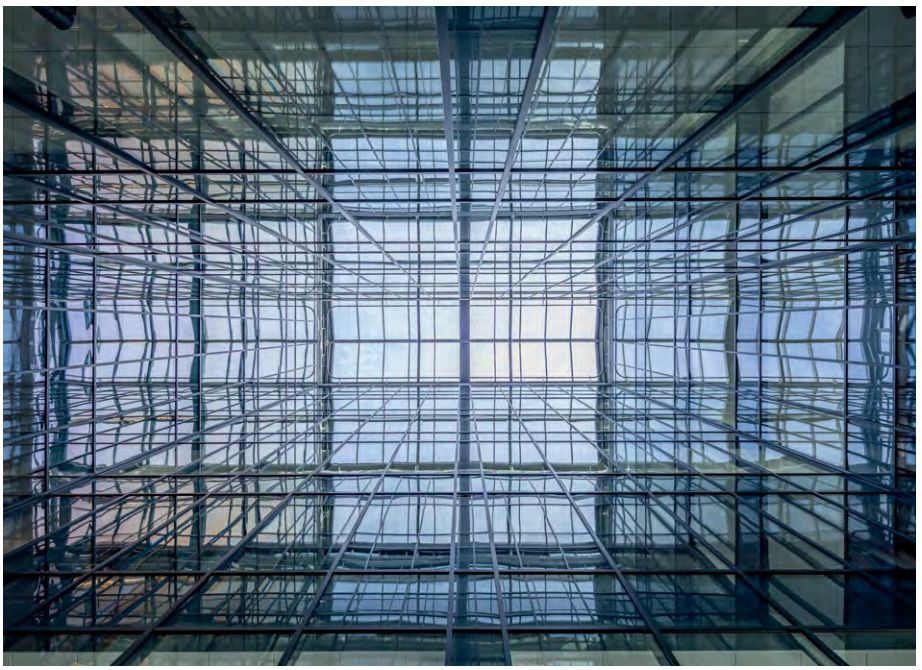

Reiterating the importance of correct specification of internal aluminium fire screens

In the UK, internal fire screens are subject to stringent performance and safety standards to ensure they provide effective fire resistance and compartmentation. The key applicable standard is BS EN 13501-2, which classifies the fire resistance performance of building elements, including glazed screens, in terms of integrity (E), insulation (I), and radiation (W). Testing is carried out to BS EN 1634-1, which assesses the resistance of door and shutter assemblies and glazed elements to fire exposure. Additionally, the Building Regulations Approved Document B sets out the fire safety requirements for internal separations and escape routes, specifying how long a fire screen must resist fire and prevent the passage of smoke and flames in various building types and risk areas.

Aluminium framed fire screens offer a compelling combination of strength, fire performance and design flexibility that often surpasses other materials. They are lightweight yet structurally robust, allowing for slimmer profiles and larger glazed areas that maximise natural light while maintaining critical fire protection. Aluminium is inherently corrosion-resistant and durable, reducing long-term maintenance costs, and can be finished in a wide range of powder-coated colours to suit any interior aesthetic. Combined with advanced fire-resistant glazing and internal insulation materials, aluminium systems can achieve high fire ratings without compromising on style or installation efficiency, making them a smart choice for modern commercial and residential environments.

To make aluminium framing fire resistant, manufacturers incorporate specialised fire-retardant materials between the frame profiles that act as thermal barriers and insulators. These typically include intumescent strips or inserts, which expand rapidly when exposed to heat, sealing gaps and preventing the passage of flames and smoke. Within the aluminium frames ceramic insulation, and/or gypsum-based infills are also used to maintain the structural integrity of the frame under extreme temperatures. Together with fire-rated glazing and compatible gaskets, these elements allow the aluminium fire screen system to achieve the required EI classification, ensuring both integrity and insulation performance during a fire event.

Modern aluminium fire systems are thermally broken and incorporate specialist glazing and gaskets, allowing them to meet EI30, EI60, or even EI120 classifications (maintaining integrity in minutes) while maintaining slim, elegant profiles suitable for contemporary interiors. This combination of strength and precision engineering allows for larger glazed areas and minimal sight-lines, enhancing aesthetics without compromising safety.

Aluminium is fully recyclable without loss of properties, contributing to low embodied carbon and supporting circular construction practices. Its durability also ensures long service life with minimal maintenance, making it ideal for high-traffic environments such as offices, hospitals, and educational buildings. Additionally, aluminium systems can be finished in a wide range of colours and textures through powder coating or anodising, ensuring both compliance with fire safety standards and alignment with the architectural vision of the interior space.

It is crucial to source both the frames and glazing from a single, tested supplier when specifying fire-rated glazed screens to ensure full system compatibility and certified performance. Fire resistance is achieved through a precisely engineered combination of frame, glazing, seals, and fixings that have been tested together as a complete assembly under BS EN 1634-1. Mixing components from different manufacturers can invalidate the certification and compromise the screen integrity and insulation performance in a fire situation. Using one approved supplier guarantees that the system has been independently tested and accredited as a whole.

aluprofliving.com

ASWS extends life of hardwood windows atop Ikea's new store

Ikea takes its environmental responsibilities; these include the sustainable sourcing of materials, very seriously. It is fitting, therefore, that the creation of the company's latest store in the UK has featured the conservation of 14 large hardwood windows.

The Swedish chain's ESG commitments focus on three key areas – Health & Sustainable Living, Climate, Nature & Circularity. It follows that the carefully considered in-situ repair of these mansard frames by fenestration repair specialist, **Associated Steel Window Association (ASWS)**, offers a respectful resonance.

With up to 50 personnel on site at any one time, ASWS deployed all of its tradecraft on the project, including the skilled team of carpenters, glaziers, fitters and painters directly involved up on Level 5 of the building which will now be let as high-spec offices. And, although there was a level of decay due to the weather and poor maintenance down the years, ASWS was confident from early on that the mix of side hung casements set within fixed lights could be given a new lease of life.

Mainly measuring 1.6m wide by 2.7m high, though some were 3.7m long, the ageing wooden windows were also close to floor level and reached up into the eaves. While the actual frames remained in place, ASWS demounted the sashes so that they could be stripped and repaired in its compact workshop set up on site.

asws.co.uk

AluK supports contractors applying for BSR approval

Aluminium systems company **AluK** has come up with an innovative way to support architects and main contractors applying for Building Safety Regulator (BSR) approval – even at PCSA stage.

The aluminium systems company is offering comprehensive, off-the-shelf technical submission packs for its glazed facades which architects and main contractors can add to their BSR applications and then, if required, use to competitively tender the project from AluK's network of authorised commercial installers after approval has been received.

The packs include full NBS specifications for AluK's window, door and curtain walling systems, product data sheets and sectional details in .DWG, structural and thermal calculations, full interface details and the mandatory competency statement. The details are tailored for each individual project, and include all the necessary test data from AluK's in-house test facility.

Jordan Kingman, AluK's Head of Commercial Projects, says the packs have been developed in close collaboration with main contractors who have been applying for BSR approval earlier in the process to try to circumvent the current delays, while still fulfilling all the requirements of the Building Safety Act (BSA).

Based in Chepstow, AluK is one of the UK's leading designers and manufacturers of aluminium profile systems for the residential, commercial and trade sectors.

More details on AluK's commercial support are at:

www.alukgb.com/commercial

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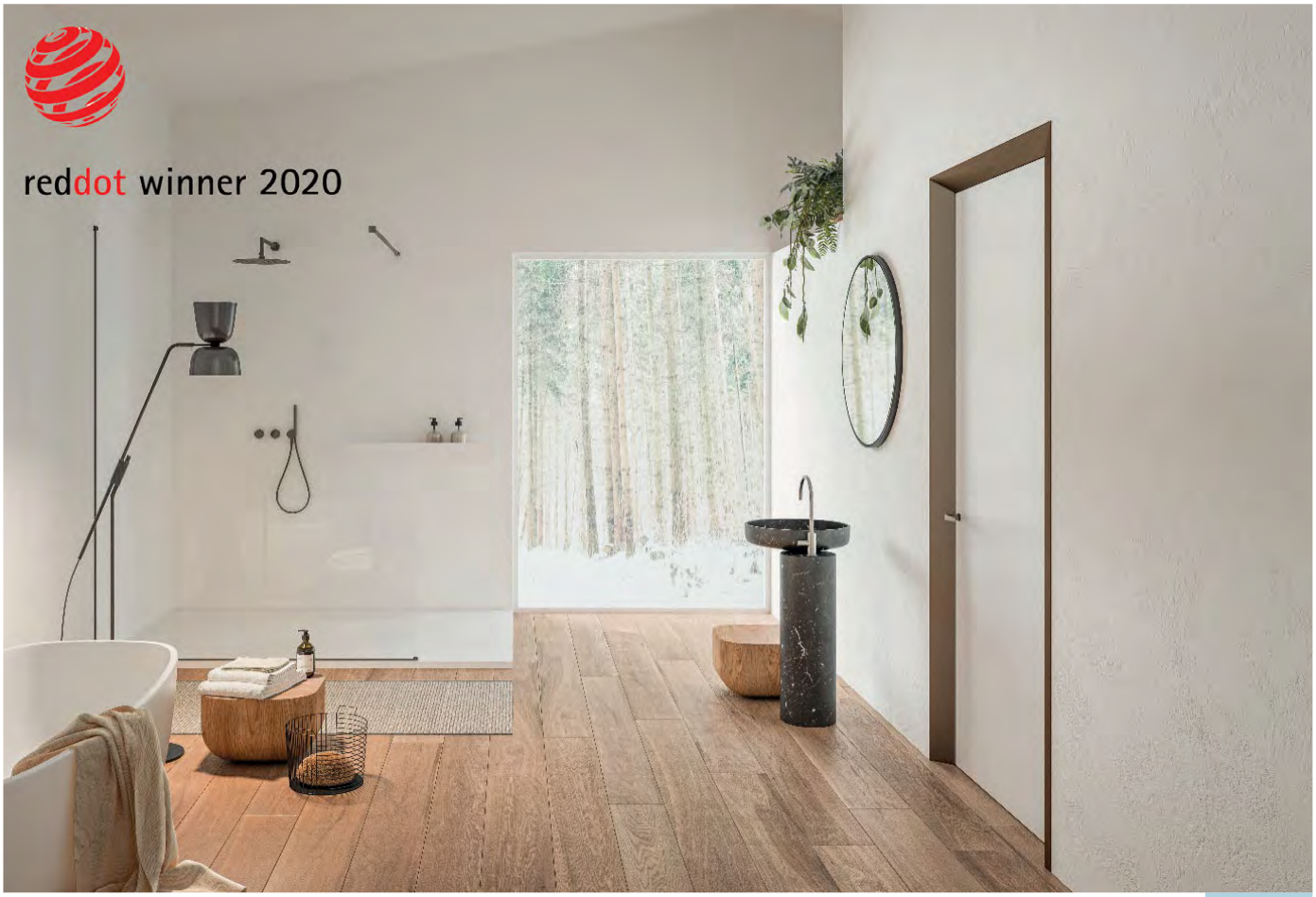

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ECLISSE 40: A New Angle to Door Design

The way we think about internal doors is changing. For years, the trend has been all about clean lines and invisible frames – doors that disappear completely into the wall. But now, ECLISSE 40 brings a new perspective to the UK market, quite literally.

With its distinctive 40-degree splayed frame, this hinged door collection doesn't aim to hide. Instead, it adds a subtle but striking detail that enhances the surrounding architecture.

A frame designed to be seen

Where most flush-to-wall systems are designed to blend in, the ECLISSE 40 system introduces a carefully angled aluminium frame that becomes part of the design itself. On one side of the hinged system, the door remains perfectly flush with the wall for that seamless, contemporary look. On the other, the 40-degree bevel creates a sculptural shadow line that catches the light and draws the eye.

It's a small detail, but one that changes the whole experience of moving through a space. The frame gives the door depth and presence, creating an elegant transition between rooms.

As designers Francesco Valentini and Lorenzo Ponzelli describe it, the goal was simple: to turn a hidden structural element into a subtle design feature.

Award-winning design recognition

The concept's strength has already been recognised on the international stage. ECLISSE 40 received a Red Dot Design Award for its innovative approach to architectural detailing – praised for transforming an often-overlooked building component into an element of true design expression.

The award highlights how ECLISSE 40 successfully bridges the gap between functional performance and aesthetic impact, offering something genuinely new for architects and interior designers who care about every detail.

Precision engineering and performance

ECLISSE is well known for combining minimalist aesthetics with robust engineering, and the 40 collection is no exception. The frame is made from anodised aluminium, offering long-lasting strength, resistance to corrosion, and a perfectly crisp edge detail.

The system includes adjustable hinges, a magnetic latch, and a choice of handles that complement the frame. The door sits perfectly flush when closed, supported by a built-in tensioning system that maintains alignment over time.

A choice of finishes

The ECLISSE 40 frame can be specified in a range of finishes to suit any design scheme.

This attention to detail ensures every element – from frame to handle – contributes to a unified and refined design language.

Integrating with your design vision

The ECLISSE 40 system offers both aesthetic and practical benefits that make it well-suited to a range of architectural and interior applications:

• *Residential projects:* Create elegant room dividers or discreet en-suite entrances that offer both visual simplicity and subtle sophistication.

• *Commercial and hospitality spaces:* Use the bevel detail to frame doorways in reception areas, corridors, and meeting rooms – adding character without compromising on minimalism.

• *Refurbishments:* The system can be used to upgrade existing openings, giving older spaces a modern edge without intrusive structural work.

Designers and developers can also experiment with lighting – for example, using directional lighting to emphasise the bevel, creating a gentle play of light and shadow around the door.

A subtle statement

For readers of ABC&D Magazine – architects, designers, and developers – ECLISSE 40 represents a new way to think about detail. It's understated but never invisible; refined but never purely decorative.

The 40-degree frame adds depth, form, and a sense of craftsmanship to what was once a purely functional element. It's a reminder that great design often lies in the smallest details – even in the humble door frame.

ECLISSE 40 is now available across the UK, offering architects and specifiers a unique system that perfectly balances form and function.

To learn more, visit eclisse.co.uk or contact us on 0333 5770828

JR35

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The Crucial Component for Your Double Fire Doors

Allegion UK, a leading name in fire safety hardware and supplier of the Zero Z304 CE fire door coordinator, highlights the importance of fitting a fire door coordinator to double fire doors to enable them to close in the correct sequence, preventing gaps which could allow fire and smoke to spread.

Iain Banks, Product Marketing Manager at Allegion UK, comments: "All fire doors must be fitted with a door closer to ensure they stay closed. However, double fire doors can pose a dangerous risk of closing incorrectly and becoming ineffective if they are not fitted with an appropriate fire door coordinator. A correctly fitted fire door coordinator ensures double fire doors always close in the correct sequence, remain closed, and maintain an effective barrier against fire and smoke."

Featuring a unique surface rebate catch, the Zero Z304 CE fire door coordinator will ensure the correct closing sequence of your double fire doors every time. Suitable for use on timber and steel fire doors, the Z304 is CE & UKCA marked to EN 1158:1997 and assessed to BS EN 1634-1:2014 for complete peace of mind.

JR32

To learn more about the Z304 fire door coordinator and its various finishes and adjuster arm lengths, visit **zeroplus.co.uk** or call **01785 282 910**

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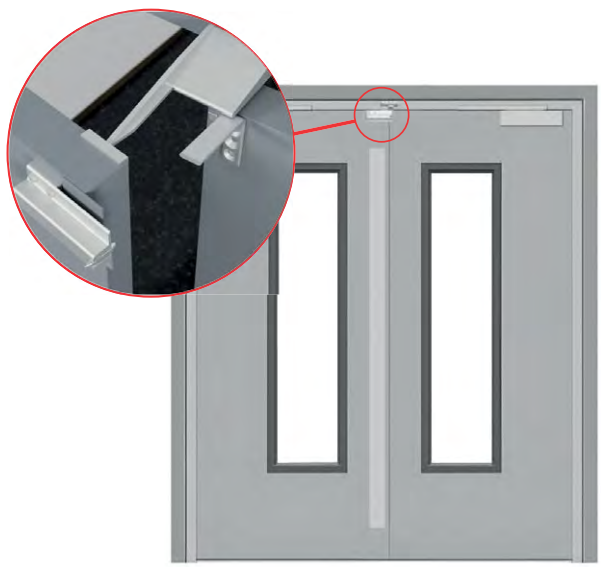

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JR33

Solid oak floors for state-of-the-art forensic facility

Junckers solid hardwood flooring has been installed at the new headquarters for Forensic Science Ireland. Designed and built to the latest ISO standards to provide state-of-the-art premises, it provides substantially increased capacity to meet demand.

Designed by the Office of Public Works, the tailor-made forensic science facility includes 32 specialist 'clean rooms', laboratories, offices, storage, and support workspaces. Installed by Floorform, Junckers' Oak Classic two-strip flooring is fitted in all non-scientific areas, adding a warm and natural backdrop to the bright and airy rooms, walkways and circulation areas.

A Junckers solid wood floor will help achieve a healthy and balanced indoor environment.

With a perfectly smooth surface, it cannot harbour dust or mites, and as an all-natural material, wood helps maintain an even temperature in a room and reduces static from electrical equipment. Junckers' floors hold the Danish Indoor Climate label. The certification, recognised by BREEAM, gives specifiers the confidence to specify flooring which will contribute to a high degree of wellbeing in a building.

www.junckers.co.uk
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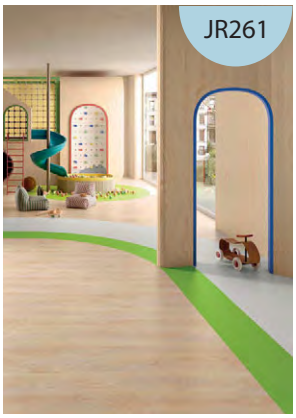
Quieter Classrooms with Optimise 70



Modern school classrooms are a tough place for any floor, but the **IVC Commercia**l Optimise 70 range might well be the perfect solution. Affordable, tough, easy to maintain and with class-leading impact noise reduction, it upgrades any classroom floor in need of replacement.

Made in Europe by IVC, Optimise 70 is a heavy-duty (0.70mm wear layer) heterogeneous vinyl floor that delivers more than just outstanding wear characteristics. With a choice of 40 designs, including everything from wood plank and herringbone to terrazzo and bright colours, it can certainly create an inspiring classroom setting while supporting pupil concentration thanks to its 19dB of impact sound reduction. And with Sanitec anti-bacterial and Hyperguard+ protection, it's a floor that's hygienic and easy to maintain too.

Jake Parks, national sales manager, IVC Commercial, says: "The importance of setting a high-quality learning environment is now well recognised and so schools are looking for floors that are not only exceptionally tough and easy to look after, but that can also inspire and support the next generation. Optimise 70 has all the characteristics needed and is widely available from distributors across the UK. It is the perfect go-to classroom floor for contractors refurbishing school environments."

www.ivc-commercial.com

GRAHAM appointed to deliver a new building for Meadow High School in Harefield

GRAHAM has been awarded a c.£14m contract by Hillingdon Council for the design and construction of a new academic building for pupils with special educational needs and disabilities (SEND) at Meadow High School in Harefield.

Meadow High School is a mixed-gender SEND secondary school catering to 257 pupils in school years 7-14 (aged 11-19) with Moderate Learning Difficulties (MLD) and Autism Spectrum Disorder (ASD).

There are SEND schools in Hillingdon, which are at full capacity and, with demand growing in recent years for support for pupils with additional needs, there is a pressing need to increase facilities in the borough. This new 2276m^2, two-storey academic building will provide a supportive and best-in-class learning environment while enhancing existing capacity for up to 100 pupils.

Works will include the creation of a range of learning spaces and a multi-use games area, along with extensive landscaping surrounding the building. Additionally, the installation of temporary classrooms, ancillary structures, heat pump and substation enclosures, along with revised vehicular access, car and cycle parking and associated external works.

Pat O'Hare, Regional Director at GRAHAM, said: "This new building will significantly improve SEND facilities and capacity in Meadow High School, also contributing to meeting increasing demand in the wider borough. Thoughtfully designed to ensure an optimum, inspiring, safe and high-quality educational environment for pupils with a range of additional needs, we are excited to deliver this fantastic and much needed project."

GRAHAM will work in collaboration with a project team that includes architect Noviun Architects and structural and civil engineer Hydrock.

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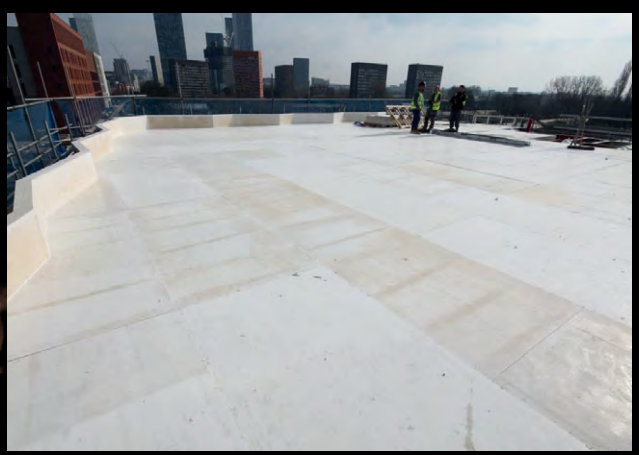

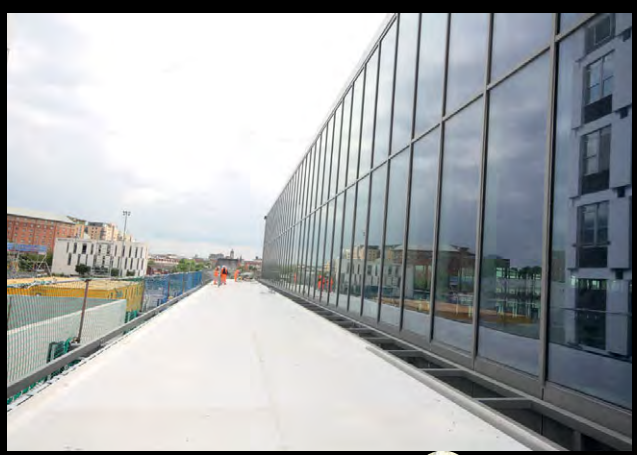

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